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# HEALTH STATISTICS

*FROM THE U. S. NATIONAL HEALTH SURVEY*

## Attitudes Toward Co-operation in a health examination survey

*A study of factors associated with stated intentions of co-operation*

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Abraham A. Ribicoff, Secretary

PUBLIC HEALTH SERVICE

Luther L. Terry, Surgeon General

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# NATIONAL CENTER FOR HEALTH STATISTICS

Forrest E. Linder, Ph. D., Director  
Theodore D. Woolsey, Assistant Director

## U. S. NATIONAL HEALTH SURVEY

Theodore D. Woolsey, Chief  
Alice M. Waterhouse, M.D., Chief Medical Advisor  
James E. Kelly, D.D.S., Dental Advisor  
Walt R. Simmons, Statistical Advisor  
O. K. Sagen, Ph.D., Chief, Health Examination Survey  
Philip S. Lawrence, Sc. D., Chief, Health Interview Survey  
Margery R. Cunningham, Staff Assistant  
Robert T. Little, Chief, Computer Applications

The U. S. National Health Survey is a continuing program under which the Public Health Service makes studies to determine the extent of illness and disability in the population of the United States and to gather related information. It is authorized by Public Law 652, 84th Congress.

## CO-OPERATION OF THE NATIONAL OPINION RESEARCH CENTER AND THE UNIVERSITY OF CHICAGO

Under legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies. The methodological study in this report was performed under a contractual arrangement with the National Opinion Research Center, The University of Chicago.

# PREFACE

## BACKGROUND OF THE STUDY

This is one of a series of methodological studies planned by the U. S. National Health Survey in the development of a special Health Examination Survey to collect morbidity data based on clinical examinations of a representative sample of the population. The results of two studies have appeared in reports entitled A Study of Special Purpose Medical-History Techniques<sup>1</sup> and Co-operation in Health Examination Surveys.<sup>2</sup>

The particular value of a health examination survey lies in its ability to produce reliable diagnostic data on morbidity through the use of medical personnel and objective laboratory tests and measurements. However, the development of this special survey presented a series of problems requiring solution before it could be set under way. Methodological studies were necessary since valid and tested methods did not exist for the collection of many of the needed types of health data, and since improvement and standardization of techniques were vital to the success of the program.

Results of several community studies involving health examinations indicated that one of the principal problems of conducting a nationwide health examination survey would be a potentially low rate of response. The Baltimore,<sup>3</sup> Hunterdon,<sup>4</sup> and Pittsburgh<sup>5</sup> studies involving both household interviews and physical examinations indicated that a complex of factors involving attitudes and health experiences may combine to produce substantial nonresponses. Although the effect of the nonresponse is not known, it is a potential

source of serious bias in the data produced by clinical examinations.

Thus results of these earlier studies clearly indicated a need for systematic efforts to estimate the amount of co-operation to be expected in a national sample study and to investigate the more important factors associated with favorable and unfavorable response patterns.

As an initial step in the study of response to be expected in a health examination survey, a supplemental question regarding willingness to be examined was added to the health interview, which is a continuing part of the National Health Survey. Analysis of the results, as reported in Series D-2 of Health Statistics from the U. S. National Health Survey, provided useful information about relative degrees of co-operation to be expected by region, urban, and rural areas, and selected demographic variables.

However, it was believed desirable to carry further the study of willingness to participate and, in particular, to investigate differences in the attitudes of persons expressing interest in being examined and of those who were apparently reluctant. The National Health Survey asked the National Opinion Research Center (NORC) to undertake such a study. The study also offered an opportunity to investigate, for the purpose of increasing response rates, the relative value of varying several of the actual arrangements for the examination, such as the length of the examination, transportation arrangements, location of the examination center, and the examiners used.

The scope of the NORC project was determined by the following considerations:

1. The general objective was to investigate the attitudes, health experiences, and other factors associated with response to a request to participate in a nationwide health examination survey.

2. NORC interviews would be conducted with persons previously interviewed in the regular sample of the Health Interview Survey. This feature of the design was desirable for two major reasons: First, a large reservoir of health data would thus be available for combined use with the attitudinal and health experience data to be gathered in the second interview. Securing extensive data in both areas in a single interview would have posed special problems of interviewer training and

<sup>1</sup>U.S. National Health Survey. *A Study of Special Purpose Medical-History Techniques*. Health Statistics, Series D-1. PHS Publication No. 384-D1. Public Health Service, Washington, D. C., January 1960.

<sup>2</sup>U.S. National Health Survey. *Co-operation in Health Examination Surveys*. Health Statistics, Series D-2. PHS Publication No. 384-D2. Public Health Service, Washington, D. C., June 1960.

<sup>3</sup>Commission on Chronic Illness in 1933-34. *Chronic Illness in a Large City. The Baltimore Study* (Chronic Illness in the United States, Vol. IV). Harvard University Press, Cambridge, Mass., 1937.

<sup>4</sup>Commission on Chronic Illness. *Chronic Illness in a Rural Area. The Hunterdon Study* (Chronic Illness in the United States, Vol. III). Harvard University Press, Cambridge, Mass., 1939.

<sup>5</sup>Gien, R., and Cobb, S.: Further Study of the Nonparticipation Problem in a Morbidity Survey Involving Clinical Examination. *J. Chronic Diseases* 7: 321-331, April 1958.

greatly lengthened the NORC interview. Second, asking respondents again about their willingness to participate in a health examination survey would provide a check of the stability of responses secured in the initial health interview. It was felt that the cross-classification of these responses would more nearly reflect the behavior expected if an actual examination were being offered.

3. The sample was restricted to the U.S. urban noninstitutional population. The restriction to urban population was imposed because it was only in the urban areas that both NORC and National Health Survey interviewers could economically interview the same sample.

4. The population to be studied was to be the adult population under 65 years of age. It had already been decided to exclude children from the health examination survey, and at the time the study was done it was the intention to exclude persons 65 years of age and over.

5. It was not expected that this preliminary investigation would yield conclusive answers to the problem but rather a series of working hypotheses. The resulting hypotheses and methods developed were to be studied further in a series of field pretests of the whole health examination survey procedure. Also, it was not anticipated that a single method would be equally applicable to areas of different population densities or even geographic sections of the Nation.

6. It was recognized that in this type of study stated intentions of co-operation do not necessarily coincide with eventual behavior when an examination is offered. However, it seemed reasonable to suppose that these stated intentions would at least be indicative of behavior to be expected in making initial appointments for an examination. Hence, asking about willingness to participate could provide only some tentative information about how people would behave in keeping appointments. Both the National Opinion Research Center and the National Health Survey recognized that it would require more experimentation in situations where examinations were actually being offered and conducted before effective methods could be devised to counteract objections.

\* \* \* \* \*

For the special studies which are carried out at its expense, but are not directly conducted by the National Health Survey, a staff member is assigned primary responsibility for liaison with the research organization doing the study. In addition to keeping closely informed on the study progress and conveying the viewpoint of the National Health Survey in decisions on study methodology, the liaison person edits the final research report for publication in Health Statistics, Series D. For this study, Elijah L. White discharged these responsibilities.

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# ATTITUDES TOWARD CO-OPERATION IN A HEALTH EXAMINATION SURVEY

The following research report was prepared by the National Opinion Research Center, University of Chicago, under a contract with the U.S. National Health Survey. Paul Borsky, Senior Study Director, directed the project and was responsible for the analysis and report presented here. Ann Brunswick served as Assistant Study Director and participated in all phases of the study. The methodology, findings, and conclusions are those of the National Opinion Research Center. The Bureau of the Census co-operated in providing selected health data from the regular NHS survey for the sample of households to be interviewed by the field staff of NORC.

## THE RESEARCH PROBLEM

This report is a special methodological study undertaken in preparation for initiating a health examination survey of a nationwide sample of the adult population. The research was carried out by the National Opinion Research Center (NORC) of the University of Chicago as a contract study for the U. S. National Health Survey of the Public Health Service.

### Objective of This Study

Since an unsatisfactory response rate could nullify the best planned and best conducted sample survey, and prevent any valid generalizations of survey findings, the National Health Survey early recognized the problem of nonresponse as very crucial. Aware that respondent co-operation and nonco-operation involve questions of human motivation and behavior, the Public Health Service contracted with the National Opinion Research Center to investigate the problem. NORC was asked to determine, if possible, the factors which influence willingness to participate in a health examination.

The agreement called for a special questionnaire to be developed and administered to a sample of households previously included in the regular household interview survey of the National Health Survey. The major objective was to obtain increased knowledge of the factors associated with response patterns, leading to working hypotheses and methods designed to minimize problems of response in the projected survey.

### Other Relevant Research Findings

An indication of the serious magnitude of the nonco-operation problem is revealed by three other recent health examination surveys. Despite intensive persuasion efforts in these surveys, from

30 to 40 percent of the public failed to co-operate in a free health examination. Obviously such large nonparticipation rates represent a potential source of serious bias in the research findings.

A summary of the participation rates achieved in these three local community studies is presented below.

Acceptance of medical examinations in three population surveys

Population surveys	Medically examined	
	Number of persons	Percent of population initially contacted
Hunterdon County, 1952-55 (Commission on Chronic Illness) (8)-----	846	72
Baltimore 1953-55 (Commission on Chronic Illness) (5,6)-----	809	63
Pittsburgh, 1953-54 (Arthritis Study, U. of Pittsburgh) (1,4)---	429	61

NOTE: Numbers in parentheses refer to references listed at the end of this text.

Unfortunately, none of these studies had built into their basic plans any systematic scheme for determining the reasons for co-operation or nonco-operation. However, Chen and Cobb<sup>1</sup> did a post-examination attitude study in the Pittsburgh arthritis survey and were able to gain some insight

into one problem, while other researchers have reported subjective impressions and some sociological characteristics of co-operators which provide additional clues about the factors influencing co-operation. Most of these health examination studies were limited to assessing the health needs of a local community or to the study of particular illnesses or conditions. The only nationwide study was one conducted by NORC<sup>2</sup> in 1955 under sponsorship of the Health Information Foundation. It consisted of a detailed opinion study of attitudes toward health needs, doctors and doctor experiences, medical facilities, and other related health matters. While the report on this study has not yet been published, the NORC was able to utilize its major findings in formulating the hypotheses for the National Health Survey project. Some of the relevant findings of the prior health examination studies are briefly summarized below.

Hochbaum,<sup>3</sup> in reporting on participation in a voluntary chest X-ray program, concluded that there were three sets of conditions that were most important in determining co-operation in a medical examination. The first was described as a psychological state of readiness, including belief in the possibility of oneself contracting the disease. He distinguished between real belief and mere verbal endorsement of the value of diagnostic (X-ray) detection. Real belief involves acceptance of the idea that a person can be sick without knowing it, and a feeling that one can benefit from the early detection of disease. Given the psychological state of readiness or the belief in the potential personal benefit from an examination, two other sets of conditions need to be met—the situational and the environmental. The situational influences include the person's observation of what he suspects may be symptoms of disease, along with the social, medical, and campaign pressures which encourage and reinforce the individual's intention to act. The environmental factors are defined as the physical circumstances which facilitate the appointment process. These include the existence of appropriate facilities and knowledge of their whereabouts, as well as the ease and convenience with which the individual can avail himself of these facilities (time of appointment, distance to be traveled, etc.). Hochbaum concluded that these three sets of conditions cut across the usual demographic stratifications of sex, income, education, et cetera, in influencing decisions to co-operate in health examinations.

Cobb et al.<sup>4</sup> in their study of the prevalence of arthritis and rheumatism in Pittsburgh found that people who do not co-operate in a clinical examination survey usually have had less experience with medical care, rate their own health higher, and less often report the presence of chronic disease. While the nonco-operators do not differ ap-

preciably from those who do co-operate with regard to negative attitudes toward medical personnel and institutions, they more often give "prefer my own doctor" as the principal reason for refusing to participate.

The Baltimore study by the Commission on Chronic Illness<sup>5,6</sup> indicated that there were five principal motives for co-operation:

1. Conformity to a group pattern
2. Fear of contracting diseases because of family history or specific symptoms
3. Curiosity about the examination procedures
4. Hypochondriasis
5. Special need for good health to stay on one's job

From largely subjective reports of the Baltimore survey staff, it was also concluded that the following factors were sometimes obstacles to co-operation:

1. Fear of the physical, economic, and social consequences of disease
2. Religious or cultist beliefs about medicine
3. Preference for one's own doctor
4. Misinformation or lack of information about the examination
5. Lack of confidence in the effectiveness of the examination
6. Inconvenience in the time or place of the examination
7. Indifference to health matters
8. The cost

Of the other studies that were reviewed for their application to our problem, a degree of consistency was reported on only some of the personal and demographic characteristics of those who co-operate and those who refuse to co-operate in health surveys. Some of the more significant observations can be summarized as follows:

1. Married people are more likely to co-operate in health examinations than unmarried.<sup>7,8,9</sup>
2. There are no differences in response on the basis of sex.<sup>1,4,5</sup>
3. Middle-aged persons are most likely to co-operate.<sup>1,4,9,10</sup> and there is least participation among the older population.<sup>1,5,7,8,11</sup>
4. There was some divergence in the findings about the role of education. The better educated persons are more likely to co-operate in general health programs; the less educated ones are the least cooperative.<sup>2,7-9,12</sup> But participation is poorest among those with a high school level education; participants more often come from the lower and upper educational groups.<sup>5</sup>
5. There is less participation in the low income group.<sup>2,5,8,9,12</sup> and more participation among the middle income group.<sup>12</sup>

6. Proxy-respondents (persons for whom another family member reported) more often agree to accept the examination and follow through on having it,<sup>5</sup> but self-respondents give more adequate (comprehensive) reports of their health status.<sup>8</sup>
7. The findings on the role of reported unmet health needs are likewise inconclusive. Nonparticipants indicate an awareness of fewer health needs—in terms of the absence of reported chronic conditions, less illness over a given period, higher rating of their current health, and the degree to which they are taking good care of their health.<sup>1, 4, 5</sup> However, actual unmet health needs are believed to be greatest among low income, low socioeconomic status groups, who are least co-operative in health programs.<sup>11, 12</sup> And the middle socioeconomic status group seems to seek most treatment for illness.<sup>12</sup>
8. The findings with regard to prior experiences with doctors are also inconclusive. Some evidence suggests that participants and nonparticipants cannot be differentiated on the basis of having a regular doctor, and/or having used a doctor over a given period, and/or the length of time since last physical examination.<sup>7, 10</sup>

Some studies have found considerable use of nonmedical personnel for treatment of illness,<sup>13</sup> especially among low socioeconomic status groups.<sup>12</sup> Low socioeconomic status groups also report having a regular family doctor less often.<sup>11</sup>

As noted before, the Pittsburgh study found that participants report more previous medical experiences than nonparticipants.<sup>1</sup>

9. Participation in health surveys is greater when others in the respondent's reference group (family, friends, co-workers, etc.) favor participation.<sup>2, 3, 5, 9, 12</sup>

Many factors undoubtedly account for the lack of greater agreement among the findings of the various studies. As noted earlier, they were conducted for different purposes and the findings often were not intended to be applicable to a cross-section of the national population. Questions and their wording differed, as did the response categories and the classification categories for respondents. There was no attempt at co-ordination among the studies. Thus, actually, any degree of agreement has significance. Even where there is disagreement, however, it helps to focus attention on the possible relevant factors influencing decisions to co-operate on a health survey.

## STUDY DESIGN

### Factors That May Influence Decisions to Co-operate in a Health Examination

After evaluation of available information from previous research, and after intensive discussions with members of the National Health Survey staff, a very detailed list of some 70 factors were compiled for possible inclusion in the questionnaire. These factors were related to areas such as:

- a) Identification of symptoms, knowledge of treatments and cures.
- b) Exposure to various sources of information in medical matters.
- c) Personal medical history.
- d) Importance of good health.
- e) Satisfaction and concern with personal health status.
- f) Unmet medical needs.
- g) Belief in avoidability and control of illness.
- h) Belief in capability of present medical knowledge to diagnose or treat illness.
- i) Attitudes toward groups of doctors, clinics and hospitals, and government and public health authorities.
- j) Co-operation with public surveys.
- k) Public spiritedness and social responsibility.

- l) Condition for acceptance of health examination, and
- m) Demographic characteristics.

### Development and Content of the Questionnaire

From this comprehensive list of factors, a personal interview questionnaire was developed and pretested in the New York City area. It soon became apparent that complete coverage of all of the factors would require a very lengthy interview of approximately two hours. Practical survey experience and budgetary limitations made such a plan impractical, so it was decided to eliminate marginal items and those which could be secured by other means. Appendix II includes a copy of the final questionnaire which actually required about an hour of interviewing time. The following is an outline and summary of the content of the questionnaire.

Questions	Content
1-8	General attitudes toward health and doctors
9-13	Belief in the possibility of becoming ill and its effects
14-20	Knowledge of specific illness

	and need to see doctor
21-26	Satisfaction with medical facilities and services now as compared to 30 years ago
27-37	Personal experiences and attitudes toward doctors
38-39	Sources of information and interest in health matters
40-46	General attitudes toward doctors, clinics, and the role of government in health matters
47-52	Attitudes toward taking the tests and measurements phase of the survey
53-56	General information about the respondent

Two further observations about the questionnaire itself are important. As will be explained below, each respondent interviewed by NORC was first interviewed by the Census on the regular National Health Survey. Consequently, information on recent illness, medical attention, and selected characteristics was available from the initial interviews. This arrangement greatly reduced the length of NORC's interview and avoided duplication of Census questioning.

The second observation involves the kind of questions generally asked. In designing a questionnaire, two types of questions are generally used—the open free-answer and the closed pre-coded. The open question asks the respondent about a general area of interest without suggesting the possible range of alternative answers. For example, the question, "What sort of things would you ask him (your doctor) about?" does not suggest the kinds of things one might ask a doctor. Such questions are most useful in determining which are the conspicuous responses and also the range of possible answers when this is not known by the researcher in advance. The major disadvantage of open questions is the uncertainty whether failure to mention an answer spontaneously represents chance forgetfulness or actual disagreement with the answer category. In order to determine the full extent of agreement or disagreement with a given question, a pre-coded question is usually most effective. This type of question clearly states each possible alternative and directly asks the respondent to select the one answer most closely reflecting his views. For example, the first question, "Would you say your own health, in general, is excellent, good, fair, or poor?" clearly poses the range of permissible responses. Fortunately, from the analysis of other NORC health studies and other reports, much was learned about the kinds of alternative answers that might be expected to different questions. This permitted the extensive use of pre-coded questions in the ques-

tionnaire, which not only saved interviewing time, since open questions are more time-consuming, but also provided more complete statistical data for the analysis.

In order to minimize any respondent bias in reported attitudes toward health, health needs, doctors, et cetera, explicit instructions were given to each interviewer regarding the kind of introduction to use. Each respondent upon completion of the original Census interview was given a letter from the Surgeon General thanking him for his co-operation and advising him that he might be called upon in the future to co-operate again in some additional health studies. When the NORC interviewer subsequently called on the respondent, he was instructed to introduce himself as an NORC representative, show his identification card, if necessary, and hand the respondent another official letter from the Surgeon General. This letter stated that NORC was "doing a special study for the Public Health Service—as part of the U. S. National Health Survey, you—or some member of your household—were interviewed not long ago about your health experience. We are now following up to get some different information—this time, your opinion on certain health matters." The interviewer was further told to avoid specific description of the kinds of questions involved, and particularly, to avoid mention of the health examination. Reports from interviewers indicate that the suggested approach was effective in practically all instances and that the sequence of questions was begun without further lengthy discussion.

#### Scope of Work and Sample Design

Since the National Health Survey covers all civilian, noninstitutionalized persons in the United States, it would have been desirable to have the study concern itself with co-operation from all segments of the population. However, several factors and decisions combined to limit the scope of the study and its sample design.

For practical reasons, primarily due to the size and composition of the examination team needed, the population to be examined initially was defined as the working-age population, 18 to 65 years of age.

A major consideration in the study design was the need for adequate health data on the sample of persons from whom the extensive data on factors influencing co-operation were to be collected. However, previous experience indicated that each of the two sets of data needed would require relatively lengthy interviewing, which if combined in a single interview would involve an unreasonably long interview.

Still another problem of the study design was whether one could accept the stated intention of

co-operation given in response to a request to come for an examination as a reliable indication of co-operation without administering an actual examination.

With these factors in mind, the study was designed with the following features:

1. The attitude questionnaire was to be administered to a sample of persons who had responded to the regular health household interview of the National Health Survey.
2. The population to be studied would be restricted to the civilian, noninstitutionalized population of the United States from 18 to 65 years of age.
3. To provide a somewhat realistic simulation of a behavioral test of intention to co-operate, the respondents would be asked both on an initial health interview and the attitudinal interview whether they would be willing to come for a health examination.
4. To pretest the proposed method of securing examinees for the health examination survey the request to co-operate would be included initially in the context of the regular health interview survey.

While these features of the study design offered some real advantages, they also involved certain limitations. The most important among these were the lack of a probability sample and the consequent limitation in producing national estimates. While it would have been desirable to select a probability sample of adults in the entire United States, it was decided, however, that this exploratory study would not attempt to establish precise national levels of response but would merely serve to identify the more important factors which appear to be influencing co-operation and nonco-operation. Further research would be needed to establish the relative numerical significance of each factor.

For reasons of economy it was decided to carry on the interviewing in those sample areas which were common to the National Health Survey and the National Opinion Research Center's area probability samples. These areas in which the two samples overlapped were mainly urban areas. Since earlier research indicated that the problem of co-operation in rural areas was likely to be significantly different from the problems in urban areas and since there were few cases available for interviewing in rural areas, it was decided to eliminate all rural areas from this initial study.

After the "overlap areas" were identified, it became apparent that there was 100 percent overlap in the large metropolitan areas, a good overlap in the small metropolitan areas, but only a fair coverage of small urban places. To establish some balance in the sample by size of urban area and geographical region, a quota was assigned to each region-size class, which was proportionate

to its true size in the U. S. urban population. Since each weekly sample of the National Health Survey is a representative cross-section in itself, it was decided to base the NORC sample in general on units of an entire week's assignment in overlap areas. Since overlap was best in large metropolitan areas, only 3-4 weeks of Census assignments were required to fill the quota for these areas. In the small metropolitan and small urban areas, almost 8 weeks of assignments were used. In fact, it was not possible to get the desirable number of cases in the small urban places due to the spotty overlap.

The Census completed its initial interview during February and March 1958; NORC reinterviewed its sample approximately one month after the Census interview. From the completed Census questionnaires NORC was given the name, address, and sex of each adult between the ages of 18-65 years. In order to obtain equal numbers of men and women in the NORC sample, and in order to minimize the social influences of any family member on the answers of another, it was decided to select only one adult from each household, alternating the sex of the person selected. Consequently, a man was selected from the first household, a woman from the second, et cetera. Where more than one adult male or female resided at a house, it was possible, in a limited number of cases, for the interviewer to have more than one eligible respondent. In such cases, the names of all eligible persons were listed on the face sheet of the questionnaire and the interviewer chose one of the eligible persons. In no case was a proxy interview permitted.

Because of the nature of the sample and the fact that this was an exploratory study in which there was a search for factors with differential impact and degree of significance, the usual tests of significance were not appropriate and therefore are not presented in this report. In some instances formal tests of significance were applied to provide some guide as to whether the differences might be accounted for by sampling variation if the sample had been a probability design. However, these results have been considered only as additional, not conclusive, evidence of possible significance. The main guide as to which factors appeared most promising was a product of (1) ranking as to how different they were, and (2) the plausibility of associated hypotheses.

It should be noted despite these necessary qualifications, that special tabulations prepared by the National Health Survey indicate that the estimates presented in this report are reasonably representative of the U. S. urban population. Appendix I presents data on comparison of this study with the National Health Survey's special tabulations.

# Response Characteristics of the Sample

In all, 835 interviews were assigned between March 17-April 15, 1958 and 762 were completed—a 91 percent completion rate.\* As indicated in table A, the area distribution of the completed sample compared favorably in most respects with the ideal regional distribution. Only in the case of other urban places, is the sample seriously deficient.

\*This discussion of response is limited to the sample of households completed by the Bureau of the Census and subsequently assigned to NORC. There was an additional loss of approximately 5 percent of the households in the original Census sample for which no evaluation of bias is possible in the following analysis.

For the 72 persons\*\* assigned to NORC but not interviewed, a great deal of information was available from the Census interview (table B). An analysis of these Census data indicates that NORC's completed interviews were in no way seriously biased. Responses to the Census interview indicate that the co-operation rate may have been overstated by only about 1 percent, but that in all other respects, the respondents and nonrespondents were not significantly different.

\*\*The number indicated in table A is 73, but one person was over 65 and incorrectly assigned.

Table A. Comparison of assigned and completed interviews with the ideal national sample

U. S. urban and urbanized areas	Proportions* in ideal national sample	Completed interviews		Interviews assigned		Percent completed
		Number	Area distribution	Number	Percent	
<u>U. S. Urban</u>						
Total-----	100.0	762	100.0	835	100.0	91.3
East-----	31.7	237	31.1	261	31.3	90.8
North Central-----	28.4	231	30.3	253	30.3	91.3
South-----	24.8	156	20.5	165	19.8	94.5
West-----	15.1	138	18.1	156	18.7	88.5
<u>Urbanized areas</u>						
Large metropolitan (over 1,000,000)-----	42.5	386	50.6	434	52.0	88.9
Small metropolitan (under 1,000,000)-----	32.3	277	36.4	299	35.8	92.6
Other urban places-----	25.2	99	13.0	102	12.2	97.1

\*Proportionate to its actual size in the U.S. population.

Table B. Type of NORC nonrespondents and reported intention to co-operate in the health examination

Type of nonrespondent	Total		Answer to Census			
	Number	Percent	Yes		No	
			Number	Percent	Number	Percent
Total-----	72	100	39	54	33	46
No NORC contact-----	41	100	28	68	13	32
Refusal-----	31	100	11	35	20	63

Table C. Percent distribution of NORC respondents and nonrespondents by selected characteristics

Characteristic	Respondents	Nonrespondents	Characteristic	Respondents	Nonrespondents
Number of cases-	762	72	Marital status-----	100	100
Family relationship-	100	100	Married-----	77	71
Head-----	59	58	Widowed-----	6	10
Wife-----	32	31	Divorced-----	4	5
Child (18 years old or over)-----	5	9	Separated-----	4	4
Other-----	4	2	Never married-----	9	10
Race-----	100	100	Income-----	100	100
White-----	86	83	Under \$3,000-----	19	23
Negro-----	14	14	\$3,000-4,999-----	27	32
Other-----	-	3	\$5,000-6,999-----	27	23
Sex-----	100	100	\$7,000+-----	27	22
Male-----	50	44	Last visit to doctor-----	100	100
Female-----	50	56	Less than 6 months ago-----	58	52
Age-----	100	100	6 months, less than 2 years-----	21	17
Under 25 years-----	10	6	2-5 years-----	11	15
25-34 years-----	22	22	5+ years-----	8	14
35-44 years-----	26	29	Don't know-----	2	2
45-54 years-----	21	12	Last dental visit---	100	100
55-65 years-----	21	31	Less than 6 months ago-----	34	22
Education-----	100	100	6 months, less than 2 years-----	25	26
Grade school-----	26	30	2-5 years-----	22	18
High school-----	51	55	5 years +-----	16	31
College-----	23	16	Don't know-----	3	3
Employment status---	100	100	NHS Supplement-----	100	100
Working-----	63	63	Self-respondent---	62	62
Looking for work---	1	-	Proxy-respondent---	38	38
Keeping house-----	31	29			
School-----	2	1			
Other-----	3	7			

In comparing other selected characteristics of the 72 nonrespondents with the 762 NORC respondents, no other important differences were found (table C). It should be noted, however, that the tendency was for nonrespondents more often to be women, somewhat older persons, and those with comparatively less education. These characteristics have frequently been found in other studies of nonresponse.

As shown in the summary table on response (table D), about 71 percent of all Census respondents

indicated willingness to co-operate. If a full 71 percent of the 31 refusals had indicated a willingness to come for the examination, the number of "yes" answers would have been 22. Since only 11 actually said "yes," the bias totals 11 answers or only 1.3 percent of the 835 assignments. On this basis, it can be concluded that the NORC sample contains little bias regarding willingness to co-operate in the health examination.

## SUMMARY OF FINDINGS

### Over-all Indications of Willingness to Co-operate

According to the plans, the National Health Survey was to have the regular Census interviewer introduce the health examination phase of the survey at the end of the household interview and arrange an appointment with all persons who were willing to co-operate. In order to pretest this procedure realistically and also to provide information on the national patterns of co-operativeness from a full U. S. probability sample, a special supplementary question was added to the entire U. S. household survey for the months of February and March 1958. This question was as follows: "As part of the Health Survey, the Public Health Service will provide a free health examination to some of the people we are interviewing. As you would expect, we cannot learn all we need to know about health just by asking questions—for some things we need actual measurements and tests. The examination will involve only one visit to a nearby place. If you are selected for this special free examination and the time and place are convenient, will you be willing to come?... How about (each related adult), do you think he will be willing to come?"

Special aspects of this question should be clearly stated. First, the health examination was placed in the context of a supplement to the Health Survey. Second, it was free and required one visit only to a nearby place. Third, the respondent was asked to assume that the time and place were convenient. Fourth, some respondents were asked to answer for themselves, while others were asked to give proxy answers for other related adults who were not home at the time of the interview. With these specific conditions in mind, the answers could be considered a first-line indication of intent to co-operate in a Public Health Service sponsored health examination. It should not be confused with actual participation rates, however, since some persons who said they intended to co-operate would fail to do so because they either changed their minds or for other reasons found it difficult to keep an appointment.

At the very end of the NORC interview, after all the general attitudes about health and doctors had been recorded, the respondent was again asked about his belief in the co-operativeness of most people he knew and about his own willingness to accept a health examination.

Question 47 first introduces the question of health examinations and asks about other people, while Question 48 concerns personal co-operativeness. The actual questions were as follows:

Q. 47. As you might expect, the Public Health Service cannot learn all they need to know about health in the Nation just by asking questions. For some things they need actual measurements and tests. How do you think most people you know will feel about helping on that part of the survey—Will they certainly come, probably come, or probably not come for these measurements and tests?

Q. 48. If you yourself are asked to come for the tests and measurements part of the survey, will you certainly come, probably come, or probably not come? Why is that?

The interviewers were told not to try to persuade the respondent in any way, but to provide limited factual information about the examination in answer to specific questions.

A combination of answers to the first offer of the health examination by Census and the second offer by NORC provides a measure of the stability of intention to co-operate. Table D summarizes these patterns of co-operation obtained from the results of two requests to participate in a hypothetical health examination survey.

As can be seen from the top line of table D, about 7 out of every 10 persons told the Census interviewer that they would accept the examination, 23 percent said "No," and almost 7 percent were either undecided or, due to an oversight by the Census interviewer, were not asked the supplement question. When NORC offered the examination a month later, a total of 8 out of 10 indicated willingness to accept, of which half said, "Certainly" they would accept, and half were a little less certain and said, "Probably yes," in light of the substantial number of "Don't know" usually found on opinion surveys, it is noteworthy that only about 2 percent answered "Don't know" to this question.

The degree of stability of stated intention is also unusually high. Three out of every four persons maintained their original answer, 64 percent continuing to say "Yes," and 11 percent saying "No" or "Don't know." About 14 percent shifted from "No" or "Don't know" to "Yes," and only half as many, 7 percent, changed from "Yes" to "No." It is impossible to state the firmness of intent of the remaining 4 percent who were not asked by Census for their views. That 70 percent of this

\* An earlier report *Co-operation in Health Examination Surveys*<sup>12</sup> presented the estimates on co-operation based on answers to this supplementary question. For a preliminary report on the findings of this study see *Motivations Toward Health Examinations*.<sup>14</sup>



Table D. Expressed intent to Census and NORC interviewers on accepting a health examination

Expressed intent	Answers to Census interview									
	Total		Yes		No		Don't know		Not asked	
	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent
Total-----	762	100.0	539	70.7	171	22.5	24	3.1	28	3.7
<u>Answers to NORC</u>										
Total yes-----	614	80.6	486	63.8	92	12.1	16	2.1	20	2.6
Certainly yes-----	301	39.5	249	32.7	36	4.7	10	1.3	6	0.8
Probably yes-----	313	41.1	237	31.1	56	7.4	6	0.8	14	1.8
Total no or don't know-----	148	19.4	53	6.9	79	10.4	8	1.0	8	1.1
Probably no-----	134	17.6	46	6.0	73	9.6	7	0.9	8	1.1
Don't know-----	14	1.8	7	0.9	6	0.8	1	0.1	-	-

later group said "Yes" to NORC, however, indicates that their original attitudes could not be too different from the other respondents who were asked by Census to indicate their intentions. Nevertheless, because any allocation of this group among the initial "Yes" or "No" Census categories would have to be arbitrary and open to challenge, it was decided to exclude this group from the subsequent detailed tables and analysis. Likewise, to keep the attitude groups as clearcut as possible, the 24 cases answering "Don't know" to Census were also kept separate. This left five different intention groups, listed below, with sufficient numbers of respondents for detailed analysis.

As indicated earlier, a statement of intention to co-operate is different from actually following through and coming to an examination. Indication of the relationship between intention or making an appointment and actually being examined must be based on actual field tests where the examinations are offered.

#### Profiles of Groups Differing in Willingness to Co-operate

Eleven sets of attitudes, health experiences, and personal variables were utilized in this inquiry to differentiate the various patterns of re-

Answer to Census	Answer to NORC	Number of respondents
Total-----	-	762
Yes-----	Certainly yes	249
Yes-----	Probably yes	237
Yes-----	No or don't know	53
No-----	Yes	92
No-----	No or don't know	79
(Don't know or not asked)-----	-	52

sponse to a request to participate in a health examination survey. These factors were:

1. Appraisal of own health status
2. Feelings of unmet health needs
3. Interest and concern about health matters
4. Importance of good health and impact of illness on living activities
5. Satisfaction with current health research efforts
6. Belief in avoidability and cure of illness
7. Reported conditions, doctor visits, and physical examinations
8. Confidence in doctor's skill and belief in his concern with patient's welfare
9. Attitudes toward clinics and the role of government in health matters
10. Selected situational and environmental factors in the arrangements for a health examination
11. Demographic variables such as age, education, and income

Response groups used for analysis in this study were defined by the cross-classification of answers given on the original Census question on co-operation and the follow-up inquiry of the NORC study. There were two consistent co-operation groups, two vacillating groups, and one consistent nonco-operation group of respondents. Groups one and two both answered "Yes" to the Census and "Yes" to the NORC. However, NORC divided the co-operators into those who said they would certainly come and those who would probably come. Thus group one consists of those who said they would certainly come and group two designates those who would probably come. Group three includes those who initially said "Yes" to the Census interview but changed to a negative response on the second request. Group four, the second vacillating group, were those who changed from a negative reply to the Census interview to a positive reply on the NORC interview. And finally, group five contains the consistently negative respondents in both interview situations.

The differences in these sets of variables used to characterize the response groups are presented below as a series of composite profiles for each group. Although some of the attitude differences among these groups are small and perhaps not significant by themselves, the fact that so many of them fall in the same pattern bolsters confidence that a larger sample would produce more significant findings.

#### Group 1—Yes-Yes-Certainly Group

The most consistent and certain co-operating group represented all persons who said "Yes" to the Census interview and "Certainly yes" to NORC. Approximately 40 percent of all respondents were

in this category, and an outstanding characteristic of the group was the greater recognition of unmet medical needs and desire for medical attention. They less often described their present health as "excellent" and more often said it was "poor." Accordingly, they generally mentioned having more chronic illness, and more often liked to talk to their doctor about their health. They also evinced greater concern about general health matters by more often thinking about, talking about, and reading and listening to health programs on radio and television.

With regard to current research on causes and cures of disease, they were less satisfied with the amount of effort currently being made and felt more should be done. When questioned about household surveys, such as this study, they usually felt it was "very important" for people to co-operate. More often, they reported the need for "especially good health to do their work well," and in appraising the economic and social impact of illness on themselves and their family, more often stated the effects would be more serious. Although more of them usually conceded the possibility of becoming seriously ill, they also had greater confidence in early diagnosis and the skill and concern of doctors in making them well. They reported more personal experiences with care at clinics and more often felt that the government should have a larger role in maintaining the health of the Nation, sex, marital status, and recency of latest doctor visit were equal among all "co-operation" groups, but a higher proportion of younger, nonwhite persons, and veterans turned out to be more consistent co-operators. Contrary to other research findings this study also found greater co-operation from the less educated, poorer, and self-respondents. Since people with lower incomes have actually been found to have greater unmet health needs, their report of greater willingness to co-operate is consistent with their own appraisal of greater personal benefits to be derived from the health examination. Other studies found, in contradiction, less co-operation among the lower socioeconomic status groups.

#### Group 2—Yes-Yes-Probably Group

The group answering "Yes" to Census, but only "Probably yes" to NORC, generally scored somewhat below the "Certainly yes" group in its basic health attitudes but above the negative and vacillating groups. There was no appreciable difference between the two co-operating groups regarding satisfaction with medical research efforts, belief in early diagnosis, or confidence in doctor skills, but there were consistent tendencies for lesser feelings on other basic attitudes. The "Probably yes" generally regarded their present

health as better, reported fewer chronic conditions, and less often desired to see a doctor about their health. They also showed somewhat less concern and interest in health matters and less often recognized the potential threat of serious illness. They less often reported the need for especially good health and when ill reported less serious consequences. The group was also more often critical of the bedside manner and personal treatment of doctors and less often reported experiences with clinics. With regard to their feelings about the role of government, they were more positive than the negative or vacillating groups but approved less government action than the "Certainly yes" group. They also were more often younger, better educated, white, and had higher incomes than the "Certainly yes" group. It should be repeated that despite these modest differences, this group was more like the "Certainly yes" respondents than the nonco-operators.

A clear indication of their less certain feelings about co-operating was shown by their belief that fewer other people would probably co-operate on the health examination. They more often reported having questions in their minds about the kinds of tests to be included in the examination and wondered why they were selected for the sample. Finally, they indicated more responsiveness to the approval of the examination by their own doctor, the local medical society, or their own spouse.

#### Group 3—Yes-No Group

The vacillating "Yes-No" response class is of particular interest because other indications seem to imply that success in gaining co-operation really depends on getting an initial "Yes" to the request for examination. There were 53 persons who shifted from "Yes" to "No." Their attitudes as revealed by our questions tended to represent viewpoints at the extremes. They reported less chronic illness than the consistent nonco-operators and seldom desired to talk to a doctor about their health. With regard to satisfaction with current research efforts, they were more like the co-operators and felt more could be done, but, as far as this study was concerned, few of them felt it was important to co-operate in such studies. They felt less need for especially good health to do their work well and reported the least impact when illness struck. Their interest and concern about health matters was the lowest, although their educational background was the highest. They were least likely to feel that the way people lived made a difference in how healthy they were and they more often recommended self-diagnosis for illness. Generally, they had less confidence in doctors' abilities to cure diseases and were least

satisfied with doctors' concern and manner in patient care. It was interesting to note that these critical attitudes toward doctors were not based on reported experiences but on the result of impressions of doctors in general. This "Yes-No" group also felt that the role of government in health matters should be restricted. Moreover, they tended to be concentrated at the two extremes with respect to age, income, and education.

Only 21 percent of the "Yes-No" group felt others would co-operate, and when asked why they themselves probably would not come for the examination, they gave such evasive reasons as, "I'm too busy," and "It depends on when and where they are given." Other reasons indicated a feeling that they personally felt little need for the examination, that their participation was not essential to the success of the survey, and that they preferred their own doctors for examination. They revealed little awareness of what might be included in the examination, and expressed few specific objections to the procedures they anticipated. Like the "No-No" group, they indicated potential persuasion by their own doctor or spouse and that the least time-consuming examination procedures would be most acceptable to them.

#### Group 4—No-Yes Group

The shift from "No" to "Yes" is believed to be partially an artifact of the Census interviewing procedures. NORC always interviewed the sample person directly, but Census, in accordance with the standard practice of the National Health Survey, accepted proxy responses from members of the family. Proxy respondents proved to be more cautious in saying "Yes" for others than those who responded for themselves. The "No-Yes" group was the group with the highest concentration of proxy respondents. While other groups had about one-third proxy respondents, the "No-Yes" group had 54 percent proxies. A separate analysis of these proxy respondents revealed that they considered themselves to be in very good health, and believed in regular doctor visits. Less than half of these proxy persons reported that they had seen a doctor in the past year in comparison with the average of almost two thirds for all other respondents. It is reasonable to assume, therefore, that the offer of an examination came at the appropriate time to induce a "Yes" response to NORC. It is also reasonable to assume that if they had been asked directly by Census in the initial interview, they would probably have said "Yes" at that time, and would not have been included in the vacillator group.

With respect to basic attitudes the whole "No-Yes" group more nearly resembles the consistent co-operators. They reported less chronic illness

and better current health, but more often felt the need for additional doctor consultation than the nonco-operators. They were least satisfied with current medical research and almost all of them felt co-operation on this study was important. There was high interest and concern about health matters and when illness strikes, the impact was almost as serious as that reported by the consistent co-operators. The "No-Yes" group felt less threatened by the possibility of becoming seriously ill, but they strongly believed that the way you live is important to your health, and more often believed in regular medical checkups. They were most satisfied and confident in their own doctor's skill and manner but were somewhat critical of doctors in general. As a group, they had had little experience with clinics and more often felt that doctors engaged in group practice were not as good as private doctors. Because so many were proxy respondents, it was understandable that they were mostly men who were at work when the Census interviewer called. It is also interesting to note that there were more nonveterans in this group.

A clue to their own co-operative intentions is shown by their belief in three out of four cases that other persons would probably co-operate on the health examination. The reason most often given for co-operating was "desiring to help the government and personal benefit from the examination." Over three fourths had questions about the kinds of tests to be given and why they were chosen in the sample. In general, they themselves had a good idea of the tests and more of them wanted their own specific conditions checked. Very few of them had any special dislikes of particular tests and more than half of them indicated that approval of their doctor or spouse might influence their decisions.

#### Group 5—No-No Group

The consistent nonco-operators, i.e., the group saying "No" to both Census and NORC, was largely composed of persons who expressed contrary views to the co-operating groups. More of them were well satisfied with the state of their current health, reported fewer chronic illness conditions, expressed satisfaction with current research efforts, and considered it less important to assist studies such as this by co-operating in the study. Fewer of them also expressed any desire to see a doctor and fewer considered "especially good health" as essential to their work. Likewise, they more often felt that their own illness would not be a heavy financial problem or burden to their families. The consistent nonco-operators as a class were also less interested in

health matters in their reading, listening to the radio, and watching television, and fewer of them considered it likely that they would encounter illness in the next year. When symptoms appeared the group was more complacent and fewer of them claimed they would consult a doctor immediately. More of them had reservations about doctors' ability to cure illness, even though they agreed with the co-operators that doctors now know more, and have better medicines, than 30 years ago. They more often felt the role of government in health should be restricted and, as a whole, were older, had higher family incomes, and more often were nonveterans.

A good reflection of their negative attitudes was also afforded by the projective question about their belief in the co-operativeness of other people, in which less than 40 percent felt others would come for the examination. When asked why they themselves would not come, they indicated their belief that they would not gain any personal benefits from the examination, and that they had other medical facilities readily available when needed. They reported little knowledge of the tests and that they had few objections to any specific procedures, but showed some general hostility to free clinics. The approval of the examination by their own doctor or spouse was reported as a possible influence on their decision, and a procedure requiring the least time and effort was also stated to have the best chance of overcoming their reluctance to co-operate.

#### Conclusions

A study of a national sample of the adult urban population indicates that the following types of people are more willing to co-operate in a free health examination: the nonwhite, younger, and middle-aged, veterans, and lower income groups. In addition, people are more apt to commit themselves to co-operate in a health examination than to commit other members of their family.

Four basic sets of attitudes and beliefs were demonstrated to be even more closely related to examination behavior than personal characteristics. These were:

1. Underlying attitudes and beliefs on health.
2. Beliefs as to the potential personal benefits to be derived from the health examination.
3. Beliefs as to the importance of furthering medical research.
4. Beliefs as to the reasonableness and appropriateness of the examination procedures and arrangements.

Each of these attitudes and beliefs is described briefly below:

### 1. Underlying Attitudes and Beliefs on Health

Underlying the degree of receptivity to a free medical examination are five general health attitudes and beliefs. Co-operators more often reported agreement with these attitudes and beliefs, while nonco-operators generally reported contrary beliefs.

a. The importance of good personal health as an objective in life.—Co-operators more often believed that especially good health was essential to do one's work well, and, therefore, strived to maintain good health. Likewise, illness more often presented them with serious social and economic problems.

b. Interest and concern in health matters.—Co-operators more often believed that the way one lives has a direct influence on one's health. They were also more interested in discussing, reading, and listening to educational health programs.

c. Belief of personal susceptibility to illness.—Co-operators more often admitted the likelihood that they would be sick in bed during the next year and granted the possibility that they could become seriously ill in the next few years.

d. Belief of the need for professional diagnosis and care of illness.—Co-operators showed less confidence in self-diagnosis and more often felt they could become sick without being immediately aware of it. They also more often felt that they should see a doctor right away for professional diagnosis and treatment upon appearance of a symptom.

e. Belief in the ability of modern medicine to cure or help illness.—Co-operators more often believed that doctors have the know-how and facilities to cure or help relieve illness and disease.

### 2. Beliefs as to the Potential Personal Benefits to be Derived From the Health Examination

Co-operators usually stated that they expected to benefit directly from the results of the examination. Underlying this strong personal motivation were the following three beliefs:

a. Dissatisfaction with personal efforts to care for health.—Co-operators more often felt that they could do more to take better care of their health.

b. Recognition of some personally unmet health needs which are susceptible to medical care.—Co-operators more often reported a desire to talk to their

doctors about their health, and more often admitted having felt the need to see a doctor without actually doing so for a variety of reasons.

c. Confidence in the skill and personal approach of their own doctor and doctors generally.—Based on their personal experiences and on what they have heard or read, co-operators generally were more confident in their own doctors and in doctors generally. Nonco-operators reported more criticisms of doctors and more often indicated a distrust of strange doctors by limiting their willingness to come for the examination to the case where their own doctor gives it.

### 3. Beliefs as to the Importance of Furthering Medical Research

The most frequent reason given for agreeing to co-operate on the health examination was a desire to help the government in its research efforts. Underlying this motive were the following three different attitudes and beliefs:

a. Recognition of the need for additional medical research efforts.—Co-operators were least satisfied with current efforts at finding causes and cures of disease. In addition, most people believed that research efforts would eventually succeed in discovering new cures for disease.

b. Recognition of the responsibility of government in maintaining the Nation's health.—Co-operators more often approved of government taking an active role in health research and in programs to promote the Nation's health.

c. Recognition of personal responsibility in assisting medical research programs.—Co-operators more often felt it was very important for them personally to co-operate in health research programs. Nonco-operators more often questioned whether their co-operation was essential to the success of the program.

### 4. Beliefs as to the Reasonableness and Appropriateness of the Examination Procedures and Arrangements

This is the last of the major conclusions and involves the convenience and approval of the arrangements for the examination.

a. Items of convenience.—These include such considerations as: (1) Travel time, (2) duration of examination, (3) time of appointment, (4) place of examination, (5) mode of transportation pro-

vided, (6) type of doctors giving examination, and (7) kind of tests and procedures used. The co-operator must believe the above items are reasonable and he also must be able to fit them into his other obligations. As expected, arrangements which make the least demands upon a person are likely to produce the greatest co-operation.

b. Desire to behave in a socially approved

manner.—Co-operators more often indicated that approval of the health examination by their spouse, friends, doctors, or other prestige groups influenced their decisions to participate in the examination. Nonco-operators were more indifferent to the approval of the examination by their peer and prestige groups.

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## DETAILED TABLES

Tabular data classified by the five major co-operation groups are presented for each of the questionnaire items. The order of grouping the tables does not follow the order in which the questions were asked. However, the number in parentheses after each topic in the tables refers to the position and context of the items on the questionnaire presented in Appendix II.

It should be noted that the totals for the five co-operation groups do not add to the total for all persons.

The total contains 16 persons who answered "no" and 36 who answered "yes" to the NORC interviewers, but were not asked the supplemental question or answered "don't know" to the original interviewers. Answers for these persons, while not shown separately, may be derived by subtracting the subtotals for five co-operation groups from the over-all totals.

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Table 1. Selected indices of appraisal of the health status by co-operation groups, NORC, 1958

Indices of health status	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Number of respondents-----	762	249	237	53	92	79
Percent distribution						
A. Self rating of own health: (1) -----	100	100	100	100	100	100
Excellent-----	31	28	29	40	33	33
Good-----	45	42	49	41	52	38
Fair-----	20	21	20	17	15	27
Poor-----	4	9	2	2	-	2
B. Number of chronic conditions: (19)-----	100	100	100	100	100	100
None-----	46	39	45	53	62	42
1-----	28	26	30	30	23	38
2+-----	26	35	25	17	15	20
C. Symptoms reported during past year or so: (19)---	*	*	*	*	*	*
Coughing for 5 or 6 days-----	23	26	25	26	18	14
Diarrhea or constipation for several days-----	17	16	18	19	17	15
Feeling tired all the time-----	26	27	26	19	25	27
Frequent headaches-----	17	21	16	13	15	13
Lump or discolored patches on skin-----	7	8	6	6	5	9
Shortness of breath-----	12	14	11	9	6	11
Sore throat, running nose-----	40	39	40	43	40	33
Unexpected loss of 10 pounds-----	4	5	3	2	5	2
Feeling thirsty all the time-----	2	2	2	2	2	2
Pains in the chest-----	9	12	10	4	6	8
Pains in the stomach-----	12	17	9	17	4	9
Number of symptoms: (19)-----	100	100	100	100	100	100
None-----	25	20	26	32	26	35
1-----	30	31	29	24	37	23
2-----	21	23	22	21	16	19
3-6-----	18	18	17	15	19	20
5+-----	6	8	6	8	2	3

\*Percentages not additive--represents percent reporting each type of symptom.

Table 2. Indices of unmet health needs by co-operation groups, NORC, 1958

Indices of unmet health needs	All persons	Common: Yes			Common: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-UK	Yes	No-UK
Number of respondents-----	762	249	237	53	92	79
Percent distribution						
A. Type of health care by most people: (2)-----	100	100	100	100	100	100
Take best care-----	23	19	22	36	23	33
Not take best care-----	74	78	76	58	74	59
Don't know-----	3	3	2	6	3	8
B. Type of health care by respondent: (3)-----	100	100	100	100	100	100
Take best care-----	46	49	43	43	46	56
Not take best care-----	53	51	56	55	53	40
Don't know-----	1	-	1	2	1	4
C. Like to consult own doctor free of charge: (5)----	100	100	100	100	100	100
Desire to talk-----	40	53	43	28	32	16
No desire to talk-----	59	47	56	72	67	83
Don't know-----	1	-	1	-	1	1
D. Did you feel need to see doctor in last year but didn't? (7)-----	100	100	100	100	100	100
Yes-----	25	32	28	13	22	11
No-----	75	68	72	87	78	89
E. Did others suggest you see doctor but you didn't? (30)-----	100	100	100	100	100	100
Yes-----	20	20	23	17	20	9
No-----	80	80	77	83	80	91
F. Argue with family members about seeing doctor? (31)	100	100	100	100	100	100
No family-----	5	6	5	10	1	8
Never argue-----	65	63	63	67	65	73
Argue about doctor:-----	30	31	32	23	34	19
Spouse wants me to go-----	7	4	8	10	5	4
Children want me to go-----	1	1	1	-	1	-
Other relatives want me to go-----	1	1	2	2	-	1
I want spouse to go-----	18	16	18	13	24	15
I want children to go-----	3	3	4	-	3	-
I want other relatives to go-----	5	7	4	4	5	3

<sup>1</sup>Type of argument add to more than total because more than one argument may be reported by each person.

Table 3. Interest and concern about the health by co-operation groups, NORC, 1958

Interest and concern	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Number of respondents-----	762	249	237	53	92	79
Percent distribution						
A. Do you think about own health: (6)-----	100	100	100	100	100	100
Fairly often-----	40	49	41	26	36	25
Once in a while-----	36	33	36	40	39	34
Hardly ever-----	24	18	23	34	25	41
B. Do you talk about own health: (6)-----	100	100	100	100	100	100
Fairly often-----	15	19	13	11	16	9
Once in a while-----	32	31	36	32	30	25
Hardly ever-----	53	50	51	57	54	66
C. Extent of reading about health matters: (38)----	100	100	100	100	100	100
Often-----	33	34	30	40	34	30
Once in a while-----	43	41	49	23	48	42
Hardly ever-----	24	25	21	37	18	28
Why? (if hardly ever)						
Don't read papers, etc-----	13	15	11	19	7	18
Skip health items-----	11	10	10	18	11	10
D. Extent of listening to radio or television health programs: (39)-----	100	100	100	100	100	100
Often-----	23	29	18	19	26	19
Once in a while-----	43	44	48	29	47	34
Hardly ever-----	34	27	34	52	27	47
Why? (if hardly ever)						
Avoid all programs-----	11	12	14	8	9	13
Avoid health programs-----	19	13	17	36	16	29
None available or other-----	4	2	3	8	2	5

Table 4. Importance of kind of health on living activities by co-operation groups, NORC, 1958

Importance of kind of health	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Number of respondents-----	762	249	237	53	92	79
Percent distribution						
A. Kind of health required by own work: (10)-----	100	100	100	100	100	100
Especially good-----	32	36	31	17	33	30
Fairly good-----	49	47	53	47	49	49
Not so good-----	18	17	16	34	18	18
Don't know-----	1	-	-	2	-	3
B. Difficulty in payment of large medical bill: (13)	100	100	100	100	100	100
Great-----	45	56	46	30	34	28
Moderate-----	31	26	33	32	32	32
Hardly any-----	24	18	21	38	34	40
C. Loss of income if sick: (11)-----	100	100	100	100	100	100
All-----	22	27	18	6	7	6
Some-----	16	14	18	9	14	10
None-----	26	21	25	49	50	46
No job-----	35	36	38	32	28	35
Don't know-----	1	2	1	4	1	3
D. Impact of illness on job (other than income loss): (11)-----	100	100	100	100	100	100
Great deal-----	7	10	6	6	7	6
Some-----	12	10	14	9	14	10
Not very serious-----	46	44	42	53	51	49
No job-----	35	36	38	32	28	35
E. Impact of illness on family: (12)-----	100	100	100	100	100	100
Great deal-----	12	14	13	19	8	10
Some-----	23	24	29	6	24	17
Not much-----	57	53	50	66	64	63
No family-----	8	9	8	9	4	10

Table 3. Satisfaction with current research on health matters by co-operation groups, NORC, 1958

Satisfaction with current research	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Number of respondents-----	762	249	237	53	92	79
Percent distribution						
A. Satisfaction with research on causes of disease: (25)-----	100	100	100	100	100	100
Enough being done-----	68	66	70	64	61	84
Not enough being done-----	28	30	26	30	36	11
Don't know-----	4	4	4	6	3	5
B. Satisfaction with research on cures of disease: (26)-----	100	100	100	100	100	100
Enough being done-----	67	66	69	66	55	77
Not enough being done-----	29	31	26	28	41	18
Don't know-----	4	3	5	6	4	5
C. Importance of co-operation on health opinion research: (34)-----	100	100	100	100	100	100
Very important-----	70	90	65	51	66	42
Fairly important-----	25	9	33	36	32	40
Hardly important-----	3	1	1	8	2	10
Don't know-----	2	-	1	5	-	8

Table 6. Attitudes on the recognition, avoidability, and cure of illness by co-operation groups, NORC, 1938

Recognition, avoidability, and cure of illness	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Number of respondents-----	762	249	237	53	92	79
Percent distribution						
A. Knowledge of symptoms of:						
Polio-myelitis (15)						
Number mentioned-----	100	100	100	100	100	100
None-----	29	29	27	36	33	33
1-----	13	16	11	9	14	17
2-----	23	20	25	26	20	16
3+-----	35	35	34	29	33	34
Tuberculosis (16)						
Number mentioned-----	100	100	100	100	100	100
None-----	26	23	27	30	23	25
1-----	23	21	29	23	13	27
2-----	27	27	24	30	37	25
3+-----	24	29	20	17	27	23
Diabetes (17)						
Number mentioned-----	100	100	100	100	100	100
None-----	50	47	50	55	47	63
1-----	17	18	18	15	18	13
2-----	17	19	16	21	20	14
3+-----	16	16	16	9	15	10
B. Persons who feel immediate recognition possible for specific illnesses: (14)						
Arthritis-----	*	*	*	*	*	*
Asthma-----	83	85	81	75	84	84
Polio-myelitis-----	77	78	75	79	79	77
Heart trouble-----	60	56	60	62	66	53
Liver trouble-----	35	40	36	21	33	34
Diabetes-----	33	34	32	26	33	39
Tuberculosis-----	19	22	16	11	20	23
Cancer-----	18	21	17	8	24	18
11-----	11	12	9	11	11	10
Summary of above immediately recognizable illnesses: (14)-----	100	100	100	100	100	100
None-----	5	4	5	6	4	11
1-2-----	25	24	28	30	22	18
3-----	28	28	24	30	26	27
4-5-----	31	31	34	32	36	29
6-8-----	11	13	9	2	12	15
Cumulative number (14)-----						
None-----	5	4	5	6	4	11
2 or less-----	30	28	33	36	26	29
3 or less-----	57	56	57	66	52	56
5 or less-----	89	87	91	98	88	85
8 or less-----	100	100	100	100	100	100

\*Percentages are recast, but represent the percentage who can recognize each illness right away.

Table 6. Attitudes on the recognition, avoidability, and cure of illness by co-operation groups, NORC, 1958--Continued

Recognition, avoidability, and cure of illness	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Percent distribution						
G. Effects of way you live on health: (4)-----	100	100	100	100	100	100
Great deal-----	56	58	51	47	65	58
Some-----	26	23	30	23	20	24
Hardly any-----	17	19	18	26	14	13
Don't know-----	1	-	1	4	1	5
D. Time likely to be sick in bed next year: (8)----	100	100	100	100	100	100
A week or more-----	30	36	27	25	30	23
3-4 days-----	15	13	19	15	10	13
None-----	55	51	54	60	60	64
E. Likelihood of getting tuberculosis, heart disease, or arthritis in 5-10 years: (9)-----	100	100	100	100	100	100
Very likely-----	7	9	7	2	3	6
Fairly likely-----	18	21	19	11	21	10
Hardly likely-----	67	63	66	70	71	66
Don't know-----	8	7	8	17	5	18
F. Chance of healthier life today compared with 30 years ago: (21)-----	100	100	100	100	100	100
Much better-----	82	81	83	79	76	84
Little better-----	9	8	9	7	17	5
Much worse-----	3	4	2	4	2	5
Little worse-----	4	5	4	4	1	4
Same-----	2	2	2	6	4	2
G. Doctors know more today than 30 years ago? (23)-----	100	100	100	100	100	100
A lot more-----	90	92	91	83	95	87
A little more-----	8	7	8	13	5	5
Less-----	1	-	1	2	-	3
The same-----	1	1	-	2	-	5
H. Are today's medicines better than 30 years ago? (24)-----	100	100	100	100	100	100
Much better-----	93	93	92	87	98	90
Little better-----	4	4	5	7	2	3
Worse-----	1	1	**	2	-	1
Same or don't know-----	2	2	3	4	-	6
I. Belief in doctors' ability to cure or help selected illnesses: (20)						
Cure or help allergy-----	88	87	89	88	88	82
Cure allergy-----	17	16	15	11	26	16
Help allergy-----	71	71	74	77	62	66
Cure or help arthritis or rheumatism-----	93	94	95	89	96	86
Cure arthritis or rheumatism-----	4	4	3	8	7	6
Help arthritis or rheumatism-----	89	90	92	81	89	80

\*\*Less than 1 percent.

Table 6. Attitudes on the recognition, avoidability, and cure of illness by co-operation groups, NDRC, 1958—Continued

Recognition, avoidability, and cure of illness	All persons	Census: Yes			Census: No	
		NDRC:			NDRC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Percent distribution						
I. Belief in doctors' ability to cure or help selected illnesses: (20)—Continued						
Cure or help asthma-----	88	91	88	83	93	77
Cure asthma-----	10	9	8	23	16	9
Help asthma-----	78	82	80	60	77	68
Cure or help diabetes-----	91	91	92	83	91	85
Cure diabetes-----	15	18	11	17	14	18
Help diabetes-----	76	73	81	66	77	67
Cure or help gallbladder-----	85	86	87	81	78	87
Cure gallbladder-----	62	64	62	57	62	58
Help gallbladder-----	23	22	25	24	16	29
Cure or help heart-----	93	94	93	87	96	91
Cure heart-----	13	13	10	17	22	14
Help heart-----	80	81	83	70	74	77
Cure or help blood pressure-----	94	94	98	89	94	90
Cure blood pressure-----	31	30	28	38	45	28
Help blood pressure-----	63	64	70	51	49	62
Cure or help kidney-----	87	87	90	81	92	78
Cure kidney-----	46	44	46	43	34	41
Help kidney-----	41	43	44	38	38	37
Cure or help piles-----	94	92	98	89	94	91
Cure piles-----	76	75	75	76	84	73
Help piles-----	18	17	23	13	10	18
Cure or help sinus-----	89	92	90	85	90	76
Cure sinus-----	23	25	21	11	28	25
Help sinus-----	66	67	69	74	62	31
Cure or help varicose veins-----	84	86	85	79	81	80
Cure varicose veins-----	37	36	35	34	42	41
Help varicose veins-----	47	50	50	45	39	39
Summary of illnesses doctors can cure or help: (20)-----	100	100	100	100	100	100
6 or less-----						
7-8-----	5	5	2	13	4	10
9+-----	9	8	10	8	7	17
	86	87	88	79	89	73



Table 6. Attitudes on the recognition, avoidability, and cure of illness by co-operation groups, NORC, 1958--Continued

Recognition, avoidability, and cure of illness	All persons	Census: Yes			Census: No		
		NORC:			NORC:		
		Cer- tainly	Prob- ably	No-DE	Yes	No-DE	
		Percent distribution					
J. Conditions which require immediate doctor visit: (18)-----		*	*	*	*	*	*
Coughing 5-6 days-----		65	67	66	66	65	57
Diarrhea or constipation several days-----		61	62	63	49	58	63
Tired all the time-----		76	78	78	60	72	74
Frequent headaches-----		81	79	85	74	80	74
Lump or discolored patches on skin-----		95	95	97	85	96	90
Shortness of breath-----		80	86	78	60	85	76
Sore throat-----		27	32	27	15	23	28
Unexpected loss of 10 pounds-----		80	82	84	74	74	72
Thirsty all the time-----		62	64	60	55	70	53
Pains in chest-----		90	92	92	83	83	87
Pains in stomach-----		80	81	82	74	76	77
Cumulative							
Number of conditions: (18)							
None-----		1	**	-	-	-	5
6 or less-----		22	18	21	40	29	27
7 or less-----		38	34	35	64	38	41
8 or less-----		55	52	54	74	56	59
9 or less-----		73	72	72	87	72	75
10 or less-----		88	87	90	89	90	85
11 or less-----		100	100	100	100	100	100

\*Percentages are sensitive, but represent the percentage who recognize the need to visit a physician.

\*\*Less than 1 percent.

Table 7. Chronic conditions, doctor visits, and physical checkups by co-operation groups,  
NORC, 1958

Chronic conditions, doctor visits, and physical checkups	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Number of respondents-----	762	249	237	53	92	79
A. Reported chronic conditions in past year or so: (19)-----		Percent distribution				
Allergy-----	13	12	11	15	13	16
Arthritis or rheumatism-----	16	22	15	13	14	15
Asthma-----	2	4	1	-	2	1
Diabetes-----	1	2	1	-	-	1
Gallbladder or liver trouble-----	5	3	7	2	3	4
Heart trouble-----	3	4	3	4	1	1
High blood pressure-----	7	9	6	9	2	13
Kidney trouble-----	5	7	6	4	3	1
Piles-----	10	8	10	11	12	9
Sinus trouble-----	21	16	24	17	27	18
Varicose veins-----	7	7	6	11	9	9
None-----	46	44	44	53	49	48
B. Proportion reporting doctor visit in past year or so for chronic conditions: (19)-----		*	*	*	*	*
Allergy-----	66	62	63	50	67	54
Arthritis or rheumatism-----	60	59	66	57	46	67
Asthma-----	71	73	33	-	100	100
Diabetes-----	100	100	100	-	-	100
Gallbladder or liver trouble-----	89	83	88	100	100	100
Heart trouble-----	86	100	71	100	100	100
High blood pressure-----	89	96	86	80	100	90
Kidney trouble-----	73	78	57	100	100	-
Piles-----	55	35	61	50	54	86
Sinus trouble-----	50	50	52	44	44	64
Varicose veins-----	47	47	38	67	62	14
Summary of persons with above conditions who saw doctor: (19)-----		100	100	100	100	100
For all conditions-----	54	55	57	44	49	54
For some conditions-----	16	17	14	28	17	14
For no conditions-----	30	28	29	28	34	32

\*Percentages are cumulative.

Table 7. Chronic conditions, doctor visits, and physical checkups by co-operation groups,  
MORG, 1958--Continued

Chronic conditions, doctor visits, and physical checkups	All persons	Census: Yes			Census: No		
		MORG:			NMRC:		
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK	
		Percent distribution					
C. Last doctor visit by number of reported chronic illnesses**		(762)	(249)	(237)	(53)	(92)	(79)
Total	Under 3 months-----	42	46	42	38	36	43
	4-11 months-----	23	21	24	30	23	19
	12+ months-----	35	33	34	32	41	38
	Total-----	100	100	100	100	100	100
None	Under 3 months-----	(346)	(98)	(106)	(28)	(57)	(33)
	4-11 months-----	32	31	32	32	30	36
	12+ months-----	24	25	26	32	25	15
	Total-----	44	44	42	36	45	49
		100	100	100	100	100	100
1	Under 3 months-----	(216)	(64)	(71)	(16)	(21)	(30)
	4-11 months-----	47	41	48	44	48	56
	12+ months-----	24	28	18	31	19	27
	Total-----	29	31	34	25	33	17
		100	100	100	100	100	100
2+	Under 3 months-----	(200)	(87)	(60)	(9)	(14)	(16)
	4-11 months-----	62	70	55	56	64	56
	12+ months-----	18	12	25	22	22	13
	Total-----	20	18	20	22	14	31
		100	100	100	100	100	100
D. Ever had complete physical examination? (27)----		100	100	100	100	100	100
No-----		9	9	12	8	8	11
Yes-----		91	91	88	92	92	89
How often do you have complete examination?-----		100	100	100	100	100	100
Every year or two-----		33	37	26	28	39	34
Just occasionally-----		58	54	62	64	53	55
Never-----		9	9	12	8	8	11
Last time you had complete examination:-----		100	100	100	100	100	100
Less than 1 year-----		37	40	33	40	44	34
1 year less than 2-----		17	18	17	11	17	17
2 years less than 3-----		14	14	12	15	16	10
3 years less than 5-----		10	8	10	11	10	9
5 years or more-----		13	11	16	15	5	19
Never-----		9	9	12	8	8	11
E. Ever had checkup when not ill? (28)-----		100	100	100	100	100	100
No-----		60	63	63	58	48	67
Yes-----		40	37	37	42	52	33
Reasons for getting checkup:		17	17	14	21	25	10
Just for checkup-----		16	15	15	15	16	15
Job, school requirements-----		1	1	2	2	2	-
Felt rundown-----		2	2	2	2	7	-
Somebody suggested it-----		1	1	1	-	2	3
Because of my age, weight-----		3	1	3	2	-	5
Other reasons-----							

\*\*Source: Data from Household Interview Survey.

Table 8. Confidence in doctors' skill and belief in his concern with patient's welfare by co-operation groups, NORC, 1958

Confidence in doctors' skill and concern with patients welfare	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Number of respondents-----	762	249	237	53	92	79
Percent distribution						
A. Do you have a doctor or clinic you usually go to? (32)-----	100	100	100	100	100	100
Yes-----	88	89	88	87	89	86
No-----	12	11	12	13	11	14
Kind of medical service usually consulted: (32)-----	100	100	100	100	100	100
Private medical doctor-----	75	76	72	74	80	76
Private clinic-----	5	5	7	4	2	4
Public clinic or hospital-----	6	7	6	7	7	4
Other-----	2	1	3	2	-	2
None-----	12	11	12	13	11	14
B. Practitioners used by family in past year: (33)-----	*	*	*	*	*	*
Medical doctor-----	89	91	88	87	88	86
Osteopath-----	7	9	9	4	3	7
Dentist, optometrist-----	10	11	11	16	4	7
Chiropractor-----	10	13	8	8	8	5
Faith healer-----	1	1	-	-	1	1
C. Interest in patients by doctors today compared with 30 years ago: (22)-----	100	100	100	100	100	100
Much more-----	34	41	31	21	34	30
Little more-----	14	14	13	13	18	15
Much less-----	14	12	14	15	12	19
Little less-----	20	17	23	27	19	17
Same-----	15	14	17	13	12	11
Don't know-----	3	2	2	11	5	8
D. Comparison of own doctor with others: (36)-----	100	100	100	100	100	100
Much better-----	24	26	20	17	35	25
Little better-----	21	21	22	23	26	13
Average-----	46	46	51	50	31	44
Not as good-----	1	ww	ww	-	-	1
Don't know-----	8	7	7	10	8	17
E. Satisfaction with treatment by doctors in past 5 years: (37)-----	100	100	100	100	100	100
Entirely satisfied-----	81	80	83	81	83	86
Some things not-----	18	19	16	19	17	14
Don't know-----	1	1	1	-	-	-
F. Have you or anyone you know, ever had any had experience with a doctor which made you lose some confidence in doctors generally? (35)-----	100	100	100	100	100	100
No-----	78	74	81	89	79	78
Yes-----	22	26	19	11	21	22
Who had experience?						
Respondent-----	8	10	8	5	7	8
Spouse or child-----	5	3	4	4	6	12
Other relative-----	5	7	3	2	7	2
Friend-----	4	6	4	-	1	-

See footnotes at end of table.

Table 8. Confidence in doctors' skill and belief in his concern with patient's welfare by co-operation groups, NORC, 1958--Continued

Confidence in doctors' skill and concern with patients welfare	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Percent distribution						
F. Have you or anyone you know, ever had any bad experience with a doctor, etc.—Continued						
How long ago?						
Less than 1 year-----	4	4	3	2	1	5
1-3 years-----	5	6	6	3	5	3
3-10 years-----	7	10	4	4	8	5
10+ years-----	6	6	6	2	7	9
G. Why do some people say they are afraid of seeing a doctor? (34)-----	*	*	*	*	*	*
May have incurable disease-----	71	67	73	77	74	70
Pain of treatment-----	13	11	15	14	14	11
Expense-----	11	11	11	10	15	10
Kind of treatment required-----	11	10	11	8	13	11
Lack of sympathy from doctor-----	7	8	8	4	10	4
Doctor may want to change habits-----	2	2	2	2	4	1
Silly to be afraid-----	6	8	3	4	9	6
H. Proportions ever using any of these reasons for not seeing a doctor: (29)-----	*	*	*	*	*	*
Something always seems to come up-----	34	33	37	30	35	27
Doctor's office is too far away-----	3	5	6	8	5	4
Waste of time waiting for doctor-----	15	14	16	17	15	15
If feel all right, are all right-----	65	60	67	64	64	73
Not bother unless sick-----	43	46	45	40	36	47
Don't think doctors can help-----	6	4	6	11	1	8
Don't learn much from checkups-----	7	7	8	8	3	4
Get better myself if I'm sick-----	12	9	12	19	12	14
Person knows health better-----	21	20	20	15	28	25
Disease is punishment for sin-----	3	7	2	6	2	8
Regular examination makes worry-----	15	14	14	17	13	24
Don't like doctors-----	11	11	12	8	13	11
Doctor might hurt me-----	7	6	7	11	7	6
Doctor might try to change my ways-----	6	10	5	2	7	2
Doctor might want to put me in a hospital-----	8	9	10	6	9	5
Don't want family to know I'm sick-----	5	6	4	2	2	6
Not spend money if OK-----	41	44	41	49	39	38
Doctor may suggest expensive treatment-----	9	10	9	4	10	5
I. Criticisms of doctors in general: (40)-----	*	*	*	*	*	*
Don't give chance to tell trouble-----	41	45	40	55	38	39
Not enough personal interest-----	55	58	57	55	50	46
Not enough free time for needy-----	55	54	57	62	49	52
Not tell you things ought to know-----	42	45	46	42	30	47
Give better care to regular patients-----	47	49	46	43	45	48
Not set appointments right-----	55	56	55	62	41	53
Give unnecessary medicine-----	30	31	31	38	18	30
Don't like consult other doctors-----	37	37	37	42	34	39
Too old fashioned-----	15	14	19	15	8	15
Work too fast—make mistakes-----	34	37	33	34	23	32
Not careful or gentle enough-----	17	18	16	32	12	16
Hurt when examining-----	13	14	12	19	12	14
More interested in money-----	39	43	37	36	36	38
Suggest unnecessary visits-----	35	39	33	36	27	33
Charge too much money-----	46	46	46	55	42	46

See footnotes at end of table.

Table 8. Confidence in doctors' skill and belief in his concern with patient's welfare by co-operation groups, NORC, 1958--Continued

Confidence in doctors' skill and concern with patients welfare	All persons	Census: Yes			Census: No		
		NORC:			NORC:		
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK	
		Percent distribution					
		*	*	*	*	*	*
J. Criticisms of own doctor: (40)-----							
Don't give chance to tell trouble-----	15	15	18	13	9	13	13
Not enough personal interest-----	21	25	22	17	16	13	
Not enough free time for needy-----	8	11	8	9	2	4	
Not tell you things ought to know-----	11	12	14	15	5	9	
Give better care to regular patients-----	13	15	15	6	11	10	
Not set appointments right-----	31	34	33	34	23	27	
Give unnecessary medicine-----	8	9	9	4	6	9	
Don't like consult other doctors-----	6	7	9	4	2	8	
Too old fashioned-----	2	2	4	-	-	1	
Work too fast--make mistakes-----	8	10	9	8	7	4	
Not careful or gentle enough-----	6	6	5	8	3	2	
Hurt when examining-----	6	6	5	9	5	4	
More interested in money-----	10	12	8	8	11	11	
Suggest unnecessary visits-----	14	15	14	11	13	16	
Charge too much money-----	17	18	18	15	15	14	

<sup>1</sup>Does not necessarily represent total range, since they are mentioned voluntarily and are not explicitly asked about on the original question.

\*Percentages are rounded off.

\*\*Less than 1 percent.

Table 9. Attitude toward clinics and role of government's health matter by co-operation groups, NORC, 1958

Attitudes toward clinics	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-OK	Yes	No-OK
Number of respondents-----	762	249	237	53	92	79
Percent distribution						
A. Experience with clinics or medical centers: (41)		100	100	100	100	100
Never had any-----	50	38	53	55	57	70
Had care in past 5 years-----	34	41	35	26	32	22
Had care more than 5 years ago-----	16	21	12	19	11	8
Kind of clinics or medical centers:						
Public-----	26	30	25	21	23	17
Private-----	23	30	22	24	19	12
Don't know-----	1	2	-	-	1	1
Satisfaction with care in clinics:-----	100	100	100	100	100	100
Entirely satisfied-----	76	77	73	74	87	78
Not entirely satisfied-----	24	23	27	26	13	22
B. Care by salaried doctors compared with private doctors: (43)		100	100	100	100	100
Better-----	4	5	3	4	4	8
Worse-----	25	22	25	23	32	20
Same-----	61	63	63	58	55	57
Don't know-----	10	10	9	15	9	15
C. Criticisms of public clinics: (44)		*	*	*	*	*
Doctors not experienced or well trained-----	20	22	18	21	20	19
Too busy to give you personal attention-----	40	40	37	47	37	42
Don't have up-to-date equipment-----	10	10	9	4	9	9
Not concerned about patient's feelings-----	23	24	20	24	18	25
Have to wait too long until doctor sees you-----	61	59	62	76	58	62
Sent to different doctor every time-----	38	39	38	43	35	35
Doctors don't try hard enough because you don't pay-----	13	16	12	9	12	14
Doctors not considerate or gentle when examining you-----	16	17	16	17	13	15
Make you feel they're doing you a favor-----	21	21	22	23	20	23
D. Attitudes toward role of government in health matters: (46)		*	*	*	*	*
Disagree "health is no business of government"-----	88	91	90	77	91	78
Agree "all doctors should work for government"-----	12	17	11	8	8	9
Agree "government should test all new vaccines"-----	89	91	92	77	94	80
Disagree "government should not provide free service to needy"-----	89	93	89	91	87	84
Disagree "government should not set up own labs"-----	80	86	78	68	83	66
Disagree "government should not provide any health insurance"-----	63	73	62	43	65	53
Agree "government should give private hospitals money for research"-----	80	82	84	72	76	71
Agree "government should make health studies"-----	94	96	96	89	98	85

\*Percentages are nonadditive.

Table 10. Situational and environmental factors in arrangements for a health examination by co-operation groups, NORC, 1958

Factors in arrangements for a health examination	All persons	Census: Yes		Census: No	
		NORC:		NORC:	
		Certainly	Probably	No-DK	Yes No-DK
Number of respondents-----	762	249	237	53	92 79
Percent distribution					
A. Beliefs of others' willingness to make examination: (47)-----	100	100	100	100	100
Certainly come-----	12	27	4	-	11 1
Probably come-----	56	56	72	21	61 32
Probably not come-----	27	14	22	66	25 48
Don't know-----	5	3	2	13	3 19
Would you be more likely to come if the examination had the approval of: (51)					
Own doctor-----	100	100	100	100	100
More likely-----	42	39	50	38	48 21
Less likely-----	*	-	-	2	1 1
No difference-----	56	61	48	58	49 70
Don't know-----	2	*	2	2	2 8
Local medical society-----	100	100	100	100	100
More likely-----	34	35	42	21	38 11
Less likely-----	1	*	*	2	- 1
No difference-----	63	64	57	66	62 80
Don't know-----	2	1	1	11	- 8
Religious advisor-----	100	100	100	100	100
More likely-----	24	28	27	15	29 11
Less likely-----	1	-	*	-	2 3
No difference-----	74	72	71	81	68 81
Don't know-----	1	-	2	4	1 5
Newspaper, radio, television-----	100	100	100	100	100
More likely-----	20	25	23	2	25 4
Less likely-----	2	1	1	-	4 1
No difference-----	77	74	75	94	70 90
Don't know-----	1	*	1	4	1 5
Spouse or friends-----	100	100	100	100	100
More likely-----	47	45	54	42	59 25
Less likely-----	1	2	*	-	- 1
No difference-----	51	53	45	58	40 70
Don't know-----	1	-	1	-	1 4
B. Information needed for decision of whether to co-operate: (49)-----	**	**	**	**	**
None-----	36	45	28	42	24 55
Describe tests-----	50	44	55	45	62 32
Why was I selected-----	16	12	18	21	20 13
Time required for tests-----	6	4	7	2	10 5
When and where tests given-----	5	4	6	8	3 4
What kind of tests do you think would be included in survey? (50)-----	**	**	**	**	**
No idea-----	34	28	37	38	28 47
Heart examination-----	35	40	33	32	37 24
Lung examination-----	32	30	34	32	40 24

See footnotes at end of table.



Table 10. Situational and environmental factors in arrangements for a health examination by co-operation groups, NORC, 1958--Continued

Factors in arrangements for a health examination	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Certainly	Probably	No-DK	Yes	No-DK
Percent distribution						
B. Information needed for decision, etc.—Con.						
Kind of tests included in survey, etc.—Con.						
Blood tests-----	25	31	22	15	24	15
Urinalysis-----	21	24	20	11	17	19
X-ray-----	19	22	17	17	14	24
Height, weight, eyes, ears-----	18	22	17	17	20	9
Over-all checkup-----	23	27	22	13	20	19
C. What kinds of tests would you especially like? (50)						
None in particular, don't know whatever necessary-----	**	**	**	**	**	**
Heart-----	64	52	62	78	68	88
Cancer-----	10	11	10	10	11	2
Lungs-----	6	7	7	6	7	-
General physical-----	6	5	6	2	10	3
Specific symptoms-----	6	8	6	4	7	2
12	17	12	2	10	6	
D. What kinds of tests would you rather not have? (50)						
None-----	**	**	**	**	**	**
Pelvic, internal-----	83	88	81	83	82	75
Blood tests-----	4	3	3	4	3	5
Miscellaneous-----	3	3	5	2	3	-
Don't want to be guinea pig-----	4	5	1	-	7	3
Don't need examination-----	2	1	3	-	4	-
Other vague and irrelevant-----	4	*	-	9	1	28
6	3	6	11	3	18	
E. Examination arrangements:(52)**						
Travel time:						
5-10 minutes-----	89	100	100	62	99	33
15-20 minutes-----	87	99	98	58	97	29
One hour-----	63	88	65	13	67	11
Time of day:						
Morning during week-----	57	71	67	36	58	5
Afternoon during week-----	58	72	64	26	72	9
Evening during week-----	69	84	74	42	77	24
Saturday morning-----	65	78	74	30	72	17
Saturday afternoon-----	65	80	72	28	72	17
Length of examination:						
30 minutes-----	89	99	99	68	99	34
1 hour-----	84	99	93	55	96	24
1 hour, 30 minutes-----	75	96	81	30	85	18
Second visit-----	82	98	90	45	92	23
Place of examination:						
Hospital or medical center-----	87	99	97	62	98	30
Church or school-----	79	94	88	47	87	23
Special trailer parked outside-----	74	88	82	47	87	24
Local doctor's office-----	88	99	99	59	100	33
Person giving examination:						
Own doctor-----	89	97	98	72	97	48
Other local doctor-----	83	97	94	49	92	23
Specialist approved by AMA-----	88	100	99	57	99	32
Financial considerations:						
Taxicab fare is paid-----	83	97	93	55	89	24
Not appropriate-----	(5)	(2)	(5)	(8)	(9)	(3)
Baby sitter paid-----	32	35	36	28	26	10
Not appropriate-----	(62)	(65)	(62)	(55)	(72)	(60)
Paid for time at examination-----	82	95	90	58	89	32
Not appropriate-----	(5)	(4)	(6)	(4)	(8)	(1)

See footnotes at end of table.

Table 10. Situational and environmental factors in arrangements for a health examination by co-operation groups, NORC, 1958--Continued

Factors in arrangements for a health examination	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
		Percent distribution				
K. Examination arrangements—Continued						
Person examined:						
Adults only-----	79	88	87	62	91	28
Not appropriate-----	(9)	(11)	(8)	(9)	(4)	(10)
Adults and children-----	34	59	60	47	60	19
Not appropriate-----	(19)	(40)	(39)	(36)	(18)	(43)
Only you-----	86	99	98	57	97	29
Personal modesty:						
Undress completely-----	82	96	91	51	95	27
Undress above waist-----	86	99	96	57	99	30
Wear coverall gown-----	88	100	98	62	98	34
Voluntary mention of other arrangements:						
Want definite appointment-----	1	1	1	2	1	1
Give choice of times-----	3	3	4	4	2	-
Specified hour—not working hour-----	9	11	10	11	9	1
If other people I know go-----	1	*	*	2	2	-

\* Less than 1 percent.

\*\* Percentages are nonadditive.

Table 11. Selected characteristics of co-operation groups, NORG, 1958\*

Characteristics	All persons	Census: Yes			Census: No	
		NORG:			NORG:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
Number of respondents-----	762	249	237	53	92	79
Percent distribution						
A. Sex-----	100	100	100	100	100	100
Male-----	50	48	46	55	62	49
Female-----	50	52	54	45	38	51
B. Family relationship-----	100	100	100	100	100	100
Head-----	59	62	56	58	63	56
Wife-----	32	30	37	52	27	32
Child-----	5	3	4	6	6	6
Other relative-----	3	4	2	2	4	4
Unrelated-----	1	1	1	2	-	2
C. Marital status-----	100	100	100	100	100	100
Married-----	77	74	78	73	83	79
Widowed-----	6	7	8	6	3	6
Divorced-----	4	7	2	4	2	5
Separated-----	4	7	1	4	4	-
Never married-----	9	5	11	13	8	10
D. Labor force status-----	100	100	100	100	100	100
Working-----	63	60	61	64	67	66
Looking for work-----	1	2	1	-	1	1
Keeping house-----	31	33	34	32	23	28
School-----	2	1	3	-	2	1
Other-----	3	4	1	4	7	4
E. Race-----	100	100	100	100	100	100
White-----	86	77	87	89	94	95
Nonwhite-----	14	23	13	11	6	5
F. Age-----	100	100	100	100	100	100
18-34-----	32	27	36	38	34	19
35-49-----	36	41	37	28	37	27
50+-----	32	32	27	34	29	54
G. Income-----	100	100	100	100	100	100
Under \$3,000-----	19	25	20	25	11	13
\$3,000-4,999-----	27	30	25	27	32	23
\$5,000-6,999-----	27	27	29	13	26	26
\$7,000+-----	27	18	26	35	31	38
H. Education-----	100	100	100	100	100	100
Grade school-----	26	32	24	34	19	23
High school-----	51	53	52	32	55	58
College-----	23	15	24	34	26	19

Table 11. Selected characteristics of co-operation groups, NORC, 1958 \*—Continued

Characteristics	All persons	Census: Yes			Census: No	
		NORC:			NORC:	
		Cer- tainly	Prob- ably	No-DK	Yes	No-DK
		Percent distribution				
I. Self and proxy respondents-----	100	100	100	100	100	100
Self respondent-----	64	68	68	64	46	71
Proxy respondent-----	36	32	32	36	54	29
J. Males—Veterans status:						
Veterans----- (N=162)	100	35	36	9	13	7
Nonveterans----- (N=193)	100	32	27	8	19	14
K. Males—Veterans status by age:						
<u>18-34</u>						
Veterans----- (N=64)	100	30	42	12	11	5
Nonveterans----- (N=36)	100	25	28	14	25	8
<u>35-49</u>						
Veterans----- (N=69)	100	36	33	7	13	7
Nonveterans----- (N=69)	100	36	30	5	20	9
<u>50+</u>						
Veterans----- (N=29)	100	45	24	3	14	14
Nonveterans----- (N=88)	100	33	26	8	15	20

\* Source: Data from Rosenhold Interview Survey.

Table 12. Intention to co-operate on health examination reported to NORC by region and size of urban area

Region and urban size	All persons		Co-operators	Non-co-operators
	Number	Percent		
Region:				
East-----	237	100	75	25
Midwest-----	231	100	81	19
South-----	156	100	83	17
West-----	138	100	86	14
Urban size:				
Large metropolitan (over 1,000,000)-----	386	100	78	22
Small metropolitan (under 1,000,000)-----	277	100	84	16
Other urban areas-----	99	100	82	18

Table 13. Index of health status by co-operation groups, NORC, 1958

Index of health status	All persons		Co-operators		Nonco-operators	
	Number	Percent	Number	Percent	Number	Percent
Health status:						
No chronic conditions--saw no doctor in past year-----	164	100	129	79	35	21
No chronic conditions--saw doctor in past year-----	182	100	150	83	32	17
One chronic illness-----	216	100	164	76	52	24
Two or more chronic illnesses-----	200	100	171	86	29	14

## APPENDIX I

COMPARISON OF RATIOS DERIVED FROM THE NORC SAMPLE  
AND THE NHS URBAN SAMPLE

Since the sample for this study was not based on a probability design, it was not possible to make the usual statistical inferences as to the precision of estimates. However, it was possible to compare the magnitudes of ratios derived from the NORC sample with those obtained from the NHS urban sample which is representative of the U. S. urban population.

As pointed out in the section on methodology, the NORC sample was selected from a large NHS sample in which a supplemental question on co-operation was asked. The ratios used in this comparison were based on answers given on the original inquiry by the total urban sample and that portion used in the NORC sample.

Table I. Percent of persons willing to participate in a health examination survey and distribution of persons in NORC and U.S. urban sample by selected characteristics

Characteristic	Percent willing to participate		Percent distribution of persons	
	NORC sample	U.S. urban sample	NORC sample	U.S. urban sample
Race				
Total-----	72.9	69.2	100.0	100.0
White-----	70.1	67.0	84.9	87.1
Nonwhite-----	88.5	84.1	15.1	12.9
Sex				
Male-----	69.3	67.5	50.1	47.0
Female-----	76.5	70.6	49.9	53.0
Age				
18-24-----	69.7	72.0	9.6	14.5
25-44-----	78.4	73.3	47.6	46.6
45-64-----	67.5	63.1	42.8	38.9
Education*				
Under 9 years-----	73.1	67.1	29.2	34.5
9-12 years-----	74.0	71.6	49.2	45.0
14+ years of college-----	69.8	67.4	21.6	20.5
Income**				
Under \$2,000-----	73.3	62.6	15.2	17.7
\$2,000-4,999-----	76.7	73.7	34.3	33.4
\$5,000-9,999-----	73.8	71.8	25.0	24.3
\$7,000+-----	66.5	65.2	25.5	24.6
Time interval since doctor last seen				
Under 3 months-----	75.0	70.7	36.0	35.5
3-11 months-----	75.0	71.2	30.2	29.8
1-2 years-----	70.1	70.5	19.9	19.3
3+ years-----	66.7	60.0	13.9	15.4
Number of chronic conditions				
None-----	69.3	66.3	45.9	51.0
1-----	71.4	70.6	27.9	27.0
2-----	81.4	73.7	15.8	12.4
3+-----	79.2	74.5	10.4	9.6

\* Education of head of household and of unrelated individuals in the household.

\*\* Income of family and unrelated individuals.

Table II. Percent of persons willing to participate in a health examination survey and distribution of persons in NORC and U.S. urban sample by region and place of residence

Region by place of residence	Percent willing to participate		Percent distribution of persons	
	NORC sample	U.S. urban sample	NORC sample	U.S. urban sample
All regions-----	72.9	69.2	100.0	100.0
Large metropolitan-----	69.2	65.5	49.9	39.0
Small metropolitan-----	75.6	67.1	34.0	32.5
Other urban-----	78.4	76.6	16.1	28.5
Northeast-----	66.1	60.7	100.0	100.0
Large metropolitan-----	65.8	60.2	70.6	59.1
Small metropolitan-----	66.7	55.8	14.9	23.7
Other urban-----	66.7	68.8	13.6	17.2
North Central-----	75.6	71.6	100.0	100.0
Large metropolitan-----	69.2	71.5	49.7	34.8
Small metropolitan-----	80.3	68.8	31.6	35.1
Other urban-----	84.6	75.0	18.7	30.1
South-----	69.7	73.3	100.0	100.0
Large metropolitan-----	52.6	59.5	14.4	11.9
Small metropolitan-----	68.1	69.3	54.5	45.0
Other urban-----	80.5	81.4	31.1	43.1
West-----	83.5	73.8	100.0	100.0
Large metropolitan-----	82.5	70.6	49.6	47.7
Small metropolitan-----	84.1	75.2	49.6	26.1
Other urban-----	100.0	78.2	0.8	26.2

Data are presented in tables I and II for both samples on a number of selected characteristics. These indicate the relative distributions in both samples of persons included and the proportion indicating a willingness to participate in a health examination survey.

The ratios on willingness to accept an examination were consistently higher in the NORC sample than those derived from the U. S. urban sample. Although most of the differences were slight, affirmative co-operation ratios from the NORC sample were particularly higher for those with income under \$2,000, persons with two chronic conditions, and where the person indicated a period of 3 or more years since a doctor was last seen (table I).

In all regions but the South, with the exception of other urban areas in the Northeast, the NORC ratios of willingness to co-operate were consistently higher than the corresponding ratios in the U. S. urban sample. The

widest differences were generally observed in the small metropolitan areas although ratios in other urban areas were higher in the North Central and West (table II).

The two samples were quite similarly distributed with respect to the characteristics presented in table I with perhaps the most noticeable difference being in the proportion of persons 18-24 years of age. Over-all, the NORC sample distribution contained a larger proportion of persons in large metropolitan areas and a correspondingly lower proportion in the smallest urban places of residence.

In summary, from the evidence presented in these tables, the samples used by NORC in the study of attitudes toward participation in a health examination did not seem to differ greatly from the representative U. S. urban sample. Thus, the findings in this report should be good approximations to what would have been obtained if the sample had been based on a probability design.

## APPENDIX II

### QUESTIONNAIRE

The items below show the exact content and wording of the questionnaire used in this study. The actual questionnaire used differed slightly in arrangement and provided for preceding part of the answers.

Good afternoon, evening! I'm from the National Opinion Research Center. As this letter says, the Public Health Service has asked us to do a special study for them and to ask you some additional questions. The first one is--

1. Would you say your own health, in general, is excellent, good, fair, or poor?  
☐ Excellent ☐ Good ☐ Fair ☐ Poor ☐ Don't know
2. All in all, do you think that most people take the best possible care of their health, or could they take better care than they do?  
☐ Take best care ☐ Could take better care ☐ Don't know
3. Would you say you take the best possible care of your own health now, or could you take better care of your health than you do?  
☐ Best possible care ☐ Could do more ☐ Don't know
- A. IF "COULD DO MORE": What are some of the things you could do to take better care of your health?
4. Do you think the way you live makes a great deal of difference in how healthy you are, makes some difference or hardly any difference at all?  
☐ Great deal ☐ Some difference ☐ Hardly any ☐ Don't know
5. Now, if you had a chance to talk to your doctor for half an hour, at no cost to you, are there any things about your health that you'd like to ask him?  
☐ Yes ☐ No ☐ Don't know
- A. IF "YES": What sort of things would you ask him about?
- B. IF "NO": Why is that?
6. A. Would you say you think about your health fairly often, once in a while, or hardly ever?  
 B. Do you talk about your health with your family and friends fairly often, once in a while, or hardly ever?  
 a. Think about: ☐ Fairly often ☐ Once in a while ☐ Hardly ever ☐ Don't know  
 b. Talk about: ☐ Fairly often ☐ Once in a while ☐ Hardly ever ☐ Don't know
7. During the last year, have you felt at any time that you should have seen a doctor, but didn't?  
☐ Yes ☐ No ☐ Don't know
- IF "YES", ASK BOTH "A" & "B":  
 A. Was it anything that kept you from doing your regular work, or were you able to continue your usual activities?  
☐ Kept from doing ☐ Able to continue ☐ Don't know
- B. Why didn't you see a doctor?
8. A. Looking ahead over the next year, how likely do you think it is that you may be sick in bed for about a week all told--Very likely, only fairly likely, or not likely at all?  
☐ Very likely ☐ Fairly likely ☐ Not likely ☐ Don't know
- B. IF "NOT LIKELY" OR "DON'T KNOW": How about being sick in bed for 3 or 4 days--Would you say it is very likely, only fairly likely, or not likely at all?  
☐ Very likely ☐ Fairly likely ☐ Not likely ☐ Don't know
- IF "VERY LIKELY" OR "FAIRLY LIKELY" OR "A" OR "B" OR "DON'T KNOW" OR "C", ASK "C":  
 C. Do you think there's anything you could do to prevent that?  
☐ Yes ☐ No ☐ Don't know
9. And how likely does it seem to you that you might get tuberculosis, arthritis, or a heart attack in the next 5 or 10 years--Very likely, fairly likely, or hardly likely at all?  
☐ Very likely ☐ Fairly likely ☐ Hardly likely ☐ Don't know
10. All in all, in order to do your work well, would you say that it is necessary for you to have especially good health, to have fairly good health, or could you do your work well even if you were not feeling so well?  
☐ Especially good ☐ Fairly good ☐ Not so well ☐ Don't know



11. A. Now, if you were sick in bed for a week, would there be somebody whose living here to take care of you, or could you get somebody in pretty easily or would it be hard to get somebody?  
☐ Somebody here ☐ Get someone easily ☐ Hard to get somebody ☐ Don't know

- B. By the way, do you have a job outside your home?  
☐ Yes ☐ No

IF "YES", ASK "C" & "D"

- C. Would you lose all of your income during that time, or only part of it, or wouldn't you lose any income at all if you were sick in bed for a week?  
☐ Lose all income ☐ Lose some income ☐ No income loss ☐ Don't know

- D. In other ways—other than income, that is—would it hurt you on your job a great deal, or some, or wouldn't it be very serious (if you were sick in bed for a week)?  
☐ Hurt great deal ☐ Hurt some ☐ Not very serious ☐ Don't know

12. And how much trouble would the rest of the family have in taking care of the house if you were sick in bed for a week—a great deal of trouble, some trouble, or not much at all?  
☐ Great deal ☐ Some trouble ☐ Not much at all ☐ No family ☐ Don't know

13. Now suppose you had a large medical bill not covered by insurance—say for \$500 or more—would you have great difficulty in paying it right away, a moderate amount of difficulty, or hardly any difficulty at all?  
☐ Great difficulty ☐ Moderate amount ☐ Hardly any ☐ Don't know

14. Now I'd like to ask you about some particular illnesses. If a person should get (each condition) do you think he could tell right away something was wrong by the way he felt or might he not know for some time that something was wrong? Now about (next condition)?

- |                  |                            |  |
|------------------|----------------------------|--|
| 1. Diabetes      | 5. Arthritis or rheumatism | For each condition check:  |
| 2. Cancer        | 6. Polio                   | Can tell right away  |
| 3. Asthma        | 7. Tuberculosis            | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know |
| 4. Liver trouble | 8. Heart trouble           |  |

15. From what you've heard or read, do you happen to know any of the signs or symptoms of polio? (What are they? Any other ways a person could tell he had polio? (Specify)

16. How about T.B. (tuberculosis)—do you happen to know any of the signs or symptoms of T.B.? (What are they? Any other ways a person could tell he might have T.B.? (Specify)

17. And how about diabetes—what are its signs or symptoms? Any other ways a person could tell he might have diabetes?

18. Now on this card is a list of health conditions that people sometimes have. I'll read each one and I'd like you to tell me if you think a person should see a doctor about it immediately, if he should take care of it himself unless it gets worse, or if he should leave it alone? First, now about "coughing for 5 or 6 days?" Now about (next condition)?

- |  |                                 |  |
|--|---------------------------------|--|
| 1. Coughing for 5 or 6 days                  | 7. Sore throat, running nose    | Check for each condition<br><input type="checkbox"/> See doctor<br><input type="checkbox"/> Cure self<br><input type="checkbox"/> Leave alone<br><input type="checkbox"/> Don't know |
| 2. Diarrhea or constipation for several days | 8. Unexpected loss of 10 pounds |  |
| 3. Feeling tired all the time                | 9. Feeling thirsty all the time |  |
| 4. Frequent headaches                        | 10. Pains in the chest          |  |
| 5. Lump or discolored patches on skin        | 11. Pains in the stomach        |  |
| 6. Shortness of breath                       |                                 |  |

19. A. Now, on the other side of that card (HAVE RESPONDENT TURN CARD OVER) — I'd like you to tell me if you yourself had any of these conditions at any time during the last year or so? (Check under "A" all those mentioned.) The first one is "coughing for 5 or 6 days?"

- B. FOR EACH CONDITION MENTIONED IN "A", ASK: Did you happen to see a doctor about (condition) in the past year? (Check one of the three codes under "B")

- |  |                                  |  |
|--|----------------------------------|--|
| 1. Coughing for 5 or 6 days                  | 13. Arthritis, rheumatism        | A. For each condition:<br><input type="checkbox"/> Have had<br><br>B. For each condition reported:<br><input type="checkbox"/> See doctor<br><input type="checkbox"/> No doctor<br><input type="checkbox"/> Don't know |
| 2. Diarrhea or constipation for several days | 14. Asthma                       |  |
| 3. Feeling tired all the time                | 15. Diabetes                     |  |
| 4. Frequent headaches                        | 16. Gallbladder or liver trouble |  |
| 5. Lump or discolored patches on skin        | 17. Heart trouble                |  |
| 6. Shortness of breath                       | 18. High blood pressure          |  |
| 7. Sore throat, running nose                 | 19. Kidney trouble               |  |
| 8. Unexpected loss of 10 pounds              | 20. Piles                        |  |
| 9. Feeling thirsty all the time              | 21. Sinus trouble                |  |
| 10. Pains in the chest                       | 22. Varicose veins               |  |
| 11. Pains in the stomach                     | None of them                     |  |
| 12. Allergy                                  |                                  |  |

IF HAD CONDITION AND DID NOT SEE DOCTOR, ASK "C"

- C. Now is it that you didn't see a doctor about (condition) for which no doctor seems? (Write number of each condition before answer.) (Specify)

20. Now, if a person had as "allergy," do you think a doctor could cure it completely, could he help it but perhaps not cure it, or couldn't he help it at all? Now about (next condition)?

- |                            |                         |  |
|----------------------------|-------------------------|--|
| 1. Allergy                 | 7. High blood pressure. | For each condition:<br><input type="checkbox"/> Complete cure<br><input type="checkbox"/> Help not cure<br><input type="checkbox"/> Couldn't help<br><input type="checkbox"/> Don't know |
| 2. Arthritis or rheumatism | 8. Kidney trouble.      |  |
| 3. Asthma                  | 9. Piles                |  |
| 4. Diabetes                | 10. Sinus trouble       |  |
| 5. Gallbladder trouble     | 11. Varicose veins      |  |
| 6. Heart trouble           |                         |  |

21. Compared to 20 years ago, do you think people's chances for living a healthy life are much better, a little better, much worse, or a little worse than they used to be?  
☐ Much better ☐ Little better ☐ Much worse ☐ Little worse ☐ About the same ☐ Don't know
22. All in all, how much interest do you think doctors take in their patients today compared to 30 years ago—much more, a little more, much less, or a little less interest than they used to?  
☐ Much more ☐ Little more ☐ Much less ☐ Little less ☐ About the same ☐ Don't know
23. Do you think doctors today know a lot more about treating sicknesses, a little more, a lot less, or a little less than they did 20 years ago?  
☐ A lot more ☐ Little more ☐ Lot less ☐ Little less ☐ About the same ☐ Don't know
24. And do you think the medicines we have today are much better, a little better, or worse than they were 30 years ago?  
☐ Much better ☐ Little better ☐ Worse ☐ About the same ☐ Don't know
25. Do you think enough is being done in this country to discover the causes of disease?  
☐ Yes ☐ No ☐ Don't know
26. And do you think enough is being done to discover new cures for disease?  
☐ Yes ☐ No ☐ Don't know
27. And have you ever had a complete physical examination?  
☐ Yes ☐ No
- IF "YES", ASK "A" & "B"  
 A. So you get a complete physical exam regularly every year or two, or just occasionally?  
☐ Every year or two ☐ Just occasionally ☐ Don't know
- B. About how long ago was the last time?  
☐ Less than 1 year ☐ 1 year, less than 2 ☐ 2 years, less than 3 ☐ 3 years, less than 5  
☐ 5 years, less than 10 ☐ 10 years or more
- C. Why did you go to the doctor at that time?
28. And have you ever gone to a doctor for a check-up or examination even though you didn't think you had anything especially wrong with you?  
☐ Yes ☐ No
- IF "YES", ASK "A" & "B"  
 A. About how long ago was this?  
☐ Less than 1 year ☐ 1 year, less than 2 ☐ 2 years, less than 3 ☐ 3 years, less than 5  
☐ 5 years, less than 10 ☐ 10 years or more
- B. And why did you go to the doctor then?
29. Now here are some reasons people give for not seeing a doctor. For each one, I'd like you to tell me whether you yourself have ever felt this way. (Some people say I read statement). Have you ever felt this way?
- A. I mean to go but something always seems to come up  
 B. I don't like to bother the doctor unless I'm sick  
 C. Regular exams just make you worry—it's like looking for trouble  
 D. I don't like doctors and avoid them as much as possible  
 E. I don't want to spend the money if I'm feeling all right  
 F. A person understands his own health better than most doctors do  
 G. I don't like being examined—the doctor might hurt me or make me feel uncomfortable  
 H. The doctor might tell me I needed some expensive medicine or treatment  
 I. Disease is a punishment for our sins and can't be avoided  
 J. I don't think doctors can help me any  
 K. I don't want my family or friends to know I'm sick  
 L. The doctor's office is so far away  
 M. I don't want to waste so much time waiting for the doctor to see me  
 N. The doctor might want me to change my ways, like eat more or stop smoking  
 O. If I'm sick, I can get better by myself without any doctor  
 P. The doctor might want to put me in a hospital  
 Q. You don't learn much about your health from regular check-ups  
 R. If you feel all right, the chances are you are all right
30. During the last year, has anyone suggested you see a doctor, but you didn't go?  
☐ Yes ☐ No
- IF "YES", ASK "A" & "B"  
 A. Who was that?  
☐ Spouse ☐ Other relative ☐ Friend, acquaintance ☐ Other (specify):
- B. Why didn't you go?
31. Do you ever argue with anyone else in the family about whether one of you should see a doctor?  
☐ Yes ☐ No ☐ No family ☐ Don't know
- A. IF "YES": Who wants who to go to the doctor?

For each condition check:  
☐ Yes  
☐ No  
☐ Don't know

32. Do you have a doctor or clinic you usually go to when you're sick?  
☐ Yes ☐ No
- A. IF "YES": What kind of doctor (clinic) is he (it)?  
 B. IF "NO": Have you ever had a regular doctor when you'd go to when you were sick?  
☐ Yes ☐ No
33. During the past year, have you or anyone in your family seen to:  
 A. A chiropractor  
 B. An osteopath  
 C. A medical doctor  
 D. Any other person for treatment or healing  
 (specify type) } For each practitioner check:  
☐ Yes  
☐ No  
☐ Don't know
34. Some people say they're afraid of seeing a doctor. What do you suppose they mean by that?
35. How could you tell me if you yourself, or anyone you know, ever had any bad experience with a doctor which made you lose some confidence in doctors generally?  
☐ Yes ☐ No
- IF "YES", ASK "A", "B", & "C"
- A. Who had that experience?  
☐ Respondent ☐ Spouse or child ☐ Other relative ☐ Friend, acquaintance
- B. About how long ago was that (the last time)?  
☐ Less than 1 year ago ☐ 1 year, less than 5 ☐ 5 years, less than 10 ☐ 10 years, less than 25 ☐ 25 years or more
- C. What was it that made you lose some confidence in doctors?
36. And how would you rate your doctor in comparing him with most other doctors in the United States—would you say he is much better than most, or a little better than most, about average, or not as good as most?  
☐ Much better ☐ A little better ☐ About average ☐ Not as good ☐ Don't know
37. Have you been entirely satisfied with the care and treatment you and your family got from doctors during the past five years or so, or were there some things about the care that you were not satisfied with?  
☐ Entirely satisfied ☐ Some things not ☐ Don't know
- A. IF "SOME THINGS NOT": What was that?
38. Could you tell me if you read about health matters in newspapers or magazines often, once in a while, or hardly ever?  
☐ Often ☐ Once in a while ☐ Hardly ever ☐ Don't know
- A. IF "HARDLY EVER": Is that because you don't read the newspapers or magazines much or because you usually skip the health items?  
☐ Don't read papers, magazines ☐ Skip health items ☐ Other reason (specify) ☐ Don't know
39. How about radio and television programs dealing with health or medicine—do you listen to those often, once in a while, or hardly ever?  
☐ Often ☐ Once in a while ☐ Hardly ever ☐ Don't know
- A. IF "HARDLY EVER": Is that because you don't listen to radio or television very much, or because you don't tune in on health programs?  
☐ Don't listen much ☐ Don't tune in health ☐ Other (specify) ☐ Don't know
40. A. Now here are some things people sometimes don't like about doctors. I'd like to know whether you personally think they are true of most doctors, true of some doctors, or true of hardly any. For example (Read "1")—do you think that's true of most doctors, true of some doctors, or true of hardly any?
- B. FOR EACH ANSWER OF "MOST" OR "SOME" IN 40A ASK: Have you yourself ever had a doctor like this?
- They don't give you a chance to tell them exactly what your trouble is
  - They don't take enough personal interest in you
  - They don't give enough free time to people who need it
  - Doctors like to give you medicine even if you don't need it
  - Doctors don't like to get other doctors' opinions about a condition
  - Doctors give better care to their regular patients than to people they don't know so well
  - They don't tell you the things you ought to know
  - Doctors don't set appointments right—you have to wait too long to see them
  - Doctors want you to come back for additional visits even if you don't need to
  - Doctors are more interested in making a lot of money than in finding out what is really wrong with you
  - Doctors hurt you when they examine you and make you feel worse than when you came in
  - Doctors take advantage and charge you more than they should
  - Doctors are too old fashioned and don't keep up with modern medicine
  - Doctors work too fast and make mistakes in finding out what's wrong with you
  - Doctors aren't careful and gentle enough when they examine you
- A.  
☐ Most  
☐ Some  
☐ Hardly any  
☐ Don't know
- B.  
☐ Yes  
☐ No  
☐ Don't know

1. In the last five years or so, have you received any care or treatment at any clinic or medical center?
- ☐ Yes ☐ No ☐ Don't know
2. Have you ever received any care or treatment at a clinic or medical center?
- ☐ Yes ☐ No ☐ Don't know
3. How is it a public or private one?
- ☐ Public ☐ Private ☐ Don't know
4. Were you always entirely satisfied with the care and treatment they gave you, or were there some things you were not so satisfied with?
- ☐ Entirely satisfied ☐ Not satisfied ☐ Don't know
5. If not satisfied: What was the trouble?
6. Has anyone you know ever had an experience with a public clinic which gave you a poor opinion of that service?
- ☐ Yes ☐ No ☐ Don't know
7. If yes, how was that?
- ☐ Spouse, child ☐ Other relative ☐ Friend ☐ Other (specify) ☐ Don't know
8. What was the trouble?
9. As you probably know, some doctors are hired by groups or business firms, to practice medicine on a salaried basis. From what you've read or heard, do you think most doctors who work for a salary are likely to treat their patients better, or worse, or about the same as private doctors who charge fees?
- ☐ Better ☐ Worse ☐ About the same ☐ Don't know
10. If better or worse: In what way do they treat their patients (better, worse) than private doctors?
11. Now I'd like to read you some things people sometimes dislike about public clinics. For each one, I'd like you to tell me whether you think it is generally true or not true about public clinics:
- a. The doctors are not as experienced or well trained  
b. They are too busy to give you personal attention  
c. They don't have up-to-date equipment  
d. They aren't concerned about the patient's feelings  
e. You have to wait a long time until a doctor sees you  
f. You are sent to a different doctor every time  
g. The doctors don't try hard enough because you don't pay them for their services  
h. They're not as considerate or gentle when they examine you  
i. They make you feel as if they are doing you a favor to see you
- Check for each statement:  
☐ True  
☐ Not true  
☐ Don't know
12. As you may know, the Public Health Service carries on several different kinds of programs—like studies on illnesses, aid for building new hospitals, and helping communities with their health problems. Are you entirely satisfied with the job now being done by the public health people, or are there some things you feel they could do better?
- ☐ Entirely satisfied ☐ Could do better ☐ Don't know
13. If could do better: What are some of the things you think they could do?
14. Now here are some different statements about the government and health. I'd like you to tell me whether you agree or disagree with each one. Now first, "The people's health is no . . ." — Do you agree or disagree?
- a. The people's health is no business of the government  
b. All doctors should work for the government and be paid a salary  
c. The government should test all new vaccines and medicines for safety  
d. The government should not provide free doctors' services for the needy  
e. The government should not set up its own laboratories for research  
f. The government should not provide any health insurance for the people to help pay for doctor and hospital bills  
g. The government should give private hospitals and universities money for research  
h. The government should make studies and publish information on the nation's health
- Check for each statement:  
☐ Agree  
☐ Disagree  
☐ Don't know
15. As you might expect, the Public Health Service cannot learn all they need to know about health in the nation just by asking questions. For some things they need actual measurements and tests. How do you think most doctors will feel about helping on that part of the survey—will they certainly come, probably come or probably not come for these measurements and tests?
- ☐ Certainly come ☐ Probably come ☐ Probably not come ☐ Don't know
16. If you yourself are asked to come for the tests and measurements part of the survey, will you certainly come, probably come, or probably not come?
- ☐ Certainly come ☐ Probably come ☐ Probably not come ☐ Don't know
17. Why is that?

49. Before you decided on coming, would you have any questions about the tests you'd want to find out about?

☐ Yes ☐ No ☐ Don't know

A. If Yes: What are they?

50. A. What sort of tests do you think they would give you? (Any others?)

B. Is there anything you'd especially like them to check about your own health?

C. Is there anything you'd rather they did not do (such as examination)?

51. A. If you knew that your own doctor approved of your coming, would you be more likely to come, would you be less likely to come, or wouldn't it make any difference in your coming for the tests and measurements?

B. If you knew the local medical society approved of your coming, would you be more likely to come, would you be less likely to come, or wouldn't it make any difference in your coming for the examination?

C. How about your religious advisor—if he approved, would you be more likely to come?

D. How about the local newspaper or radio-TV station—if they approved, would you be more likely to come?

E. Last, if your (spouse) or friends approved, would you be more likely to come?

Check for each question:

☐ More likely  
☐ Less likely  
☐ No difference  
☐ Don't know

52. In planning for the tests, we are interested in finding out what arrangements will make it easier for the greatest number of people to come. I am going to read you some of the different ways the exam can be arranged and for each one I would like you to tell me if you will certainly come, if you will probably come, or if you probably won't come. The first one is (read A-1).

A. 1. If it is given at: A place just 5-10 minutes from your home

2. A place just 15-20 minutes from your home

3. A place an hour from your home

B. 1. What if it is given on a morning during the week

2. On an afternoon during the week

3. On an evening during the week

4. On a Saturday morning

5. On a Saturday afternoon

C. 1. If your taxicab fare is paid

2. If a baby sitter were paid for when needed

3. If you were paid for the time spent at the examination

D. 1. What if it was at a hospital or medical center

2. If it was at a church or school

3. At a special trailer unit parked outside

4. At a local doctor's office

E. 1. If your own doctor gave the exam

2. If some other local doctors gave the exam

3. If some specialists approved by the American Medical Association gave the exam

F. 1. If the exam took only about half an hour

2. If the exam took about an hour

3. If the exam took an hour and a half

4. If a second visit were also necessary to get a more complete exam

G. 1. If all the grownups in your home were offered the exam

2. If the children were also offered the exam

3. If only you were selected for the exam

H. 1. If you were asked to undress completely

2. If you were asked to undress above the waist

3. If you could wear a coverall gown

I. Would any (other) arrangement make it (more) possible for you to come?

☐ Yes ☐ No ☐ Don't know

If Yes: What is that?

Check for each arrangement:

☐ Will certainly come  
☐ Will probably come  
☐ Probably won't come  
☐ Not appropriate  
☐ Don't know

Now here are just a few different questions and we'll be through.

53. Before the Census interviewer asked you about your own health—had you ever been interviewed before?

☐ Yes ☐ No ☐ Don't know

54. How important do you feel it is for people to cooperate on opinion surveys such as this, very important, fairly important, or hardly important at all?

☐ Very important ☐ Fairly important ☐ Hardly important ☐ Don't know

55. And in what countries were your parents born?

Mother: \_\_\_\_\_

Father: \_\_\_\_\_

Date: \_\_\_\_\_ Time began: \_\_\_\_\_ Time finished: \_\_\_\_\_



# SELECTED REPORTS FROM THE U. S. NATIONAL HEALTH SURVEY

Public Health Service Publication No. 564

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### U. S. National Health Survey.

Attitudes toward co-operation in a health examination survey. A study of factors associated with stated intentions of co-operation. Washington, U.S. Dept. of Health, Education, and Welfare, Public Health Service, 1961.  
45 p. tables. 25cm. (U.S. Health statistics, ser. D5)

U. S. Public Health Service. Publication no. 584-D6.  
Prepared by the National Opinion Research Center, University of Chicago in co-operation with the Bureau of the Census.

I. Medical and physical examinations. 2. Health surveys. I. Title. II. Title: Co-operation in a health examination survey. Attitudes towards. III. Chicago: University. National Opinion Research Center. IV. U. S. Bureau of the Census.  
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